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ORIGINAL ARTICLES.

THE EPIDEMIC OF TYPHOID FEVER AT PLYMOUTH, PENNA.

BY LEWIS H. TAYLOR, M.D.,
OF WILKESBARRE, PA.

THE borough of Plymouth, situated upon the banks of the Susquehanna River, three miles below the city of Wilkesbarre, in the State of Pennsylvania, is a mining town of some eight or nine thousand inhabitants of various nationalities. The main street of the town is parallel to the river and upon alluvial soil, while a large portion of the inhabitants live upon higher ground extending some distance toward the sloping mountain beyond.

The general health of the inhabitants has in past time not been worse than that of their neighbors in surrounding cities, but about the second week of April, of the present year, an epidemic of fever, of great virulence, broke out, and so sudden was the onset, that within a very few days nearly a thousand people were stricken with the dread disease. The ravages were not confined to any class of people, nor to any section of the town, but the dwellers in the mansion as well as in the hovel were alike attacked; the house upon the hillside being not more free from the scourge than that situated in the valley.

The epidemic appeared so suddenly, following upon a few days of warm weather, and the symptoms of those first attacked were so severe, that some diversity of opinion as to the true nature of the disease seemed to exist among the attending physicians. It was variously declared to be typhoid fever, malarial fever, typho-malarial fever, and typho-malarial-meningitis; but in a very short time its true nature was made manifest, and the doubt no longer existed that a true epidemic of typhoid fever was hanging over the doomed borough of Plymouth. The scourge spread with frightful rapidity, from fifty to one hundred new cases appeared daily, until nearly one thousand persons, as above stated, were affected.

Various theories as to the cause of this outbreak were put forth, the most prominent being that it was due to the accumulated filth of the town, which being acted upon by the warm rays of the April sun, had suddenly become noxious, but inasmuch as all classes of people were attacked, the clean as well as the filthy; and all parts of the town affected, the highlands as well as the valley; thoughtful minds naturally turned to the water supply as a possible cause of the invasion. But Plymouth is supplied by a stream of great purity, which comes leaping down the mountain side a distance of several miles, and is distributed through the various streets by pipes running from the lower of four suc-

cessive reservoirs, formed by huge dams of masonry across the stream. Occasionally, however, when the water in this stream is quite low, the pipes are supplied with water pumped directly into the mains from the Susquehanna River. This was the case from March 20 to March 26, but as the river water at this point is known to be reasonably pure, this fact did not seem to present sufficient explanation of the cause of so widespread an epidemic.

That the mountain stream supplying the town with water might have become polluted by fecal matter was first suggested by Dr. R. Davis, of Wilkesbarre, in an article published in the *Record of the Times* about May 1st. The publishing of the article excited considerable interest, and, as great consternation prevailed among the people upon the subject of drinking water, a committee of physicians, consisting of Drs. J. A. Murphy, J. L. Miner, and myself, was requested by the Plymouth Water Company to make a thorough investigation of its reservoirs and stream, to ascertain, if possible, whether any source of water pollution had existed, and whether the same was now operative. A very careful examination of the stream, with its several reservoirs, was made on May 6th, and specimens of water from different points procured for chemical examination.

The Committee found the stream supplied with an abundance of pure water, and no source of contamination at present existing, but between the third and fourth reservoirs, however, in the only house situated upon the stream, and within forty feet of its banks, they found a patient convalescent from typhoid fever. This patient visited Philadelphia on December 25, 1884, and while there contracted the disease. He returned to his home in January, and was quite ill with genuine typhoid fever for many weeks, having suffered from a relapse of the same after he had partially recovered. On March 18th and 19th, he suffered from attacks of hemorrhage from the bowels of so severe a type that his life was despaired of.

During the course of his illness the dejecta passed at night, without any attempt at disinfection, were thrown out upon the snow toward, and within a few feet of, the stream supplying the town, while that passed during the daytime were emptied into a privy, the contents of which lie upon the surface of the ground. That this was so done we have from the testimony of the two nurses in attendance, and it is not denied by other members of the household. These dejecta, thrown out from time to time, no doubt accumulated and remained innocuous upon the snow and frozen ground. From March 25th to March 31st, the temperature, as shown from actual records, was daily above the freezing point and sufficiently warm to melt large quantities of snow, while early in April we had frequent, light showers of rain with mild, warm weather. These

thaws and rains removed the snow, and with it the accumulated poisonous dejecta, directly into the water supply. Supposing this to have occurred between March 25th and April 5th, and allowing from ten to fourteen days as the proper period of incubation, we would expect, from this cause, an outbreak of typhoid fever to occur from the 5th to the 15th of April. The time of the proven contamination of the water supply, allowing the proper time as the period of incubation, corresponds so thoroughly with the onset of the epidemic, that the Committee could but conclude that in this explanation sufficient cause was found for the epidemic of typhoid fever in Plymouth.

The opinion that this disease, in the present case, came directly from the use of hydrant water from the reservoirs, and not from that pumped from the river in March, was strengthened by the following facts: Six hundred feet below the first reservoir from which the supply pipes start, there is found upon the banks of the stream a house in which two persons are sick with the fever. The family living in this house dip water directly from the stream overflowing from the reservoir, and have at no time used river, or hydrant water. A little further down the same stream stands a house in which hydrant water is used, and in this house the sickness prevails, while in another, situated but sixty feet away, and supplied with well water, all the inmates are free from the disease. A little further north of these houses there are found, on Temperance Hill, eleven families using well water. None of these have at any time been attacked. On the upper side of Lee Street almost every family using hydrant water is affected, while those living on the lower side of the same street all use well water, and none of them are sick.

The same relative state of affairs exists on Davenport Street. Ackley Street, which is supplied with a small pipe and back water, has but few sick, while on Franklin Street, supplied by the regular main, very many are affected. On Franklin Street one house supplied with well water was found in which two patients are ill, but of these the first to contract the fever was a girl of nine who had been attending the public schools, these schools being supplied with hydrant water. Many cases exist where well water is used, but it is found that the patients first attacked in such houses are those accustomed to drink water away from home.

Further investigation of numerous cases but confirms the opinion that persons who use well water habitually, and are suffering with the disease, are those who have been accustomed also to drink hydrant water away from home; the women and the children in such houses, except those who attend school, are not attacked.

Another striking instance was found which shows that the poison taken into the system did not come from the river water pumped into the pipes from March 20th to March 26th only. A lady came from the West to visit her sister, and arrived in Plymouth March 29th, and thus drank no river water, but she was taken ill on April 12th (about the time of the general outbreak); consequently

the poison did not enter her system until after the river water had ceased to be used. A young lady from a neighboring State visited Plymouth late in March, remaining until April 2d or 3d, and is now ill with the disease at her home. A physician from a distance, spending a few days with a friend in the borough early in April, contracted the disease, and is now reported seriously ill in another part of the State.

If the river water were the cause of this disease, as is held by some, then we should have looked for an outbreak any time from March 30th to April 2d; in other words, from ten to fourteen days after the pumping of the river water began, but the fact is, no cases of the disease appeared until about April 10th or 12th.

The Committee did not pursue the investigation further, because they believed they had already found in the facts above mentioned sufficient explanation of the cause of the epidemic. They concluded as follows:

1st. That the present epidemic in Plymouth is undoubtedly one of typhoid fever.

2d. That its exciting cause was the use of water from the reservoirs furnished some time between March 25th and April 5th, and polluted by excreta from a typhoid fever patient living near the source of water supply.

3d. We do not believe that the said epidemic was caused by drinking river water. We are led to the second conclusion from finding what, in our judgment, is sufficient evidence of past pollution of the water supply near its source, and because it is well known that excreta from one typhoid patient have frequently poisoned the water supply of a whole neighborhood and caused an epidemic of such fever.

We have only to refer in corroboration of this to the epidemic of New Boston in 1843, cited by Dr. Austin Flint, and to the outbreak at Munich in 1860, and again in 1862; at Caterham and Red Hill in 1878; and especially at Nunney in 1872. We conclude it is not due to the river water pumped directly into the company's mains from March 20th to March 26th, first: Because we have found sufficient cause elsewhere; and, again, because (though not conclusive) river water is frequently used at Plymouth and Wilkesbarre, and constantly at Nanticoke, without causing such epidemics.

We find the present water supply in very good condition, and the specimens from the several reservoirs and taps of excellent quality and purity. We have carefully tested each specimen for organic matter and find none. The specimens, with one exception, are almost entirely free from sediment, of neutral reaction, tasteless, and odorless. The exception mentioned is that taken from an *unused* hydrant at the corner of Lee and Davenport Streets. This, under a high power of microscope (immersion lens) shows infusoria and inorganic matter with traces of vegetable matter. In the specimens from the reservoirs and taps used in town, there was no appreciable sediment.

Although we may expect new cases to arise from contamination of those already existing, we believe

the chief danger to be past, and the original use no longer existing.

The epidemic, as already mentioned, is widespread. A careful estimate gives the total number of cases in Plymouth and its immediate out-ports as rather more than one thousand, while an actual count shows within the borough limits seven hundred and thirty still sick with the disease. Thus far, between eighty and ninety have died.

This most remarkable epidemic teaches us an important lesson at fearful cost, viz., that in any case of typhoid fever, no matter how mild nor how far removed from the haunts of men it may be, the greatest possible care should be exercised in thoroughly disinfecting the poisonous stools. The origin of all this sorrow and desolation occurred miles away, on the mountain side far removed from the populous town, and in a solitary house situated upon the banks of a swift-running stream.

The attending physician did not know that this stream supplied the town below with its drinking water. Here, if in any place, it might seem excusable to take less than ordinary precautions, but the sequel sadly shows that in all cases the most rigid attention to detail in destroying these poisonous germs should be enjoined upon nurses and others in charge of typhoid fever patients; while the history of this epidemic will but add another to the list of such histories which should serve to impress medical men at least, with the great necessity for perfect cleanliness, a lesson which mankind at large is slow to learn.

The Committee, in a supplemental report, recommended the Water Company not only to remove from the banks of its stream the offending privy, but also to remove privy and outhouses from its property on the banks of the fourth reservoir, lest these too, in the future, become a possible source of contamination.

The lesson of this epidemic should impress other Water Companies with the necessity of making a careful sanitary survey of their supply, and of removing from their streams, so far as may be, all possible source of contamination.

46 SOUTH MAIN STREET, May 9, 1885.

NOTE.—Since writing the above a post-mortem examination of one of the unfortunate victims has been made, Police Surgeon French and Dr. E. O. Shakespeare, of Philadelphia, being present, which establishes beyond cavil the true nature of the disease, the characteristic lesions of Peyer's glands being found, the patient having died of perforation of the bowel. This simply confirms the diagnosis of nearly all the physicians of the neighborhood, that the epidemic was purely one of typhoid fever.

AN EPIDEMIC OF ACUTE CATARRHAL CONJUNCTIVITIS—"PINK EYE."

By H. F. HANSELL, A.M., M.D.,

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WITHIN the past few weeks so many cases of acute inflammation of the conjunctiva have occurred in Philadelphia and surrounding country, as well as in

several other Eastern cities, as to warrant the use of the term epidemic. Some have presented the features of the ordinary non-epidemic catarrhal inflammation, while others, on account of the violence of the inflammation, have had the appearance of Egyptian (purulent) ophthalmia, and seemed bordering on it. Saemisch¹ thus defines conjunctivitis catarrhalis (simplex) "in general a condition of abnormally diffuse hyperæmia of the membrane attended with increased mucous secretion." It is a more or less active exudative inflammation, developing suddenly, and frequently, without assignable cause, reaching its acme in twenty-four or thirty-six hours, receding nearly as rapidly, entirely disappearing in three or four days, and leaving no trace.

As is well known, most of the forms of conjunctival inflammation are contagious, hence their liability to occur in epidemics. Exactly how the contagion is communicated is not known. It may be by actual conveyance of the discharge from a diseased eye to a healthy one by means of towels, fingers, etc.—*material means*—and it undoubtedly is in some cases, for example, in a family of several persons where each one is successively affected; but the majority of cases owe their origin to contagion conveyed through the air—*ethereal means*. An epidemic could hardly be produced by material means, but, as in yellow fever, cholera, etc., by the ethereal dissemination of the poisonous germs or bacteria. The indirect cause of the conjunctivitis, that is, the direct cause of the epidemic, may probably be ascribed to a specific poison, which depends for its life and sustenance on moist filth, decaying refuse of all kinds collected during the winter, and which, liberated from its home by the warm rays of the spring sun, makes its way to our bodies, lighting up in one acute catarrhal conjunctivitis, in another typhoid fever, in a third acute tonsillitis, etc.

The recognition of this disease is not difficult. The inflammations most resembling it, and with which it is most apt to be confounded, are scleritis, episcleritis, and iritis; but, if its prominent symptoms are remembered—bright red conjunctival injection—involving the entire membrane, greatest on the lids and gradually growing fainter towards the cornea; the mucous discharge collected in flakes in the folds, the adherence of the eyelids to one another in the morning; the history—epidemic—its sudden appearance, rapid development, and almost entire absence of pain, its disappearance in a few days under the simplest treatment; and its binocular character, the affection attacking the second eye within a few hours of the first—and these signs are seen in every case—a mistaken diagnosis must be a rare occurrence.

The prognosis is always favorable. No serious complication is apt to arise. In severe cases the inflammation extends by contiguity into the tissue of the lids beneath the conjunctiva, and produces acute blepharitis. The adjacent connective tissue becomes infiltrated and oedematous, presenting the appearance of gonorrhœal ophthalmia. The secretion, although abundant, is never purulent. Oedema of the ocular conjunctiva (chemosis) may also be present, but is

¹ Graefe and Saemisch Handbuch der Augenheilkunde.

never very intense, nor does the inflammatory action extend to the cornea or iris. The former remains perfectly transparent and the latter reacts readily to light and mydriatics. A symptom which may give the patient considerable anxiety is the peculiar appearance of a gas-jet, or other small luminous object. It is distorted from its proper shape and surrounded by a ring of colors. This symptom is caused by flakes of mucus on the cornea, through which the patient sees the light. It disappears for a short time, or is changed after winking and is of no importance. An existing error of refraction may be discovered after the inflammation has passed away by the inability of the muscle of accommodation to resume its abnormal contraction, a good and not an evil result.

The treatment is entirely local and of the mildest character. A weak astringent wash, such as borax, gr. v, and $\frac{3}{4}$ ss each of camphor water and pure water, or the same strength alum solution, used freely and frequently on a soft, clean sponge to the closed lids, and the application at night of Pagenstecher's ointment—hydrarg. ox. flav., grs. $\frac{3}{4}$ —or simple cerate will be proper for the majority of cases. If the inflammation shows a tendency to become chronic, touching the everted lid daily or every second day with silver nitrate, gr. ij— $\frac{3}{4}$ j, will speedily effect a cure.

My experience with abortive measures is not sufficient to warrant conclusions, but in one case I was able to prove the efficacy of a ten grain solution of silver. The patient, who was suffering from a severe attack in the right eye, was instructed to present himself immediately upon the appearance of the injection or sense of discomfort in the left. He did so. The silver was applied, followed by cocaine to mitigate the pain, and the next day the left was quite as well as the right. The injection had disappeared in twenty-four hours and did not return.

To prevent the spread of the disease all cloths, sponges, etc., used to cleanse an affected eye should be destroyed or thoroughly washed in a disinfectant solution. Precautionary measures, however, seem to be of little avail. In a private family consisting of a mother, four adult sons, and two servants, all were affected except one servant, although one of the sons who was the first attacked was warned to be exceedingly careful lest he should spread the disease to the others. Five of the six cases were binocular.

254 SOUTH SIXTEENTH STREET.

EVACUATION OF AN OVARIAN CYSTIC TUMOR THROUGH THE INTESTINES.

BY S. J. RADCLIFFE, M.D.,
OF WASHINGTON, D.C.

Mrs. R. F., Irish by birth, aged 46 years, married late in life, no children, menopause occurred two years previously, apparently without constitutional disturbance, consulted me August 15, 1883, on account of a considerable colored watery discharge from the vagina and "lumps" in the lower part of her abdomen, one in either side, in each inguinal region, and deep-seated uneasiness, sometimes pain, almost continually felt in those parts.

She said she had been suffering in this way for

several months, but felt some modesty in asking advice on the subject, hoping she would get better or relieved, and there would be no necessity for it. Finding her abdomen increasing in size, however, and the discharge continuing, she was compelled, as the only alternative, to make her complaints known.

I had treated her five years before while unmarried, for inflammatory rheumatism, and ever since that period she had always looked pale and cachectic. She kept about her usual occupations notwithstanding, was married, and undertook the duties of housewife with commendable alacrity; only consulting me occasionally for her old trouble of rheumatism, scarcely mentioning any abdominal pain or disturbance, or if so, it was considered of a fugitive character, and treated only in a general way.

She had greatly changed in appearance since I last saw her. She looked still pale, but wrinkled and old, and her flesh was soft and flabby, and she had shrunken like a person and looked fully sixty years of age. Though she had been a stoutly built woman, she did not move with her usual vigor and promptness, and had come to regard herself as a confirmed invalid. Her general external aspect was indicative of disease, while the functions of the heart and other organs of the body, independently of the uterus, were below normal.

On external inspection of the abdomen I found it enlarged, more so on the left side than on the right. On closer examination I discovered a large globular tumor, as large as a child's head, giving the appearance of about five months' pregnancy, of cystic outline, more or less elastic, easily defined, movable, but having some attachment to the contiguous parts, flat on percussion, occupying the left inguinal region, extending somewhat into the hypogastrium, and upwards to or above a line with the anterior superior spinous process of the ilium. On the right side a hard, firm, inelastic nodular tumor, broad, flattened, and of irregular outline, the surface as large as the palm of the hand, of a fibrous nature, bound down by adhesions and decidedly dull on percussion.

On vaginal examination I found the cervix large, swollen, and tender, bleeding to the touch; the uterus large and firm, and pressed down low in the pelvis, its mobility considerably diminished, especially noticeable by bimanual exploration, and by the probe, though the latter was employed very carefully for fear of exciting hemorrhage. The posterior vaginal cul-de-sac was almost obliterated from the pressure of the superimposed parts, and the position of the uterus was slightly oblique to the right, the os looking to the left.

Malignant disease of the uterus and its appendages was suspected—the tumor being probably fibrous or scirrhus in nature on the right side, and cystic or cysto-sarcomatous on the left side of the uterus, and of ovarian origin—and the fact was so stated to the husband of the patient, and also that medicine held out no hope for her relief. Consultation with a competent gynecologist confirmed this diagnosis, as well as the prognosis, and satisfied us that no surgical means would be of any avail in the case.

Her condition remained unchanged for five or six

weeks—the treatment in the meantime being merely palliative. Her abdomen then began to increase in size perceptibly, and the discharge from the vagina to increase, accompanied by some unpleasant odor. She suffered very much from nausea, and eructations of gas from the stomach, and it was difficult to nourish her, anorexia being a prominent symptom throughout. She consequently emaciated rapidly, but did not become so feeble as not to be able to turn or move herself in bed until towards the last. Her mental accumen did not suffer.

Three weeks before her death, which occurred about five months after my first examination, January 4, 1884, she began to have involuntary fetid stools, and one week later began to vomit without pain, straining, or effort, as if by reversed peristalsis, large quantities of a brownish, thin, soupy-looking, nearly odorless fluid, which continued at various intervals for an hour or more at a time. The intervals were not regular or constant, and depended upon no particular condition. The nausea was persistent, but its more or less intensity did not seem to govern the flow. With her head on the pillow the ejected matter would pass out siphon-like. The vomiting would begin and continue with varied force for some time, then cease, to be resumed the same day, or perhaps not until the next day or the day following. It was more continuous the last few days of life. The tumor or cyst in the left side began manifestly to diminish in size from the first vomiting, and gradually emptied, while at the time of her death—which took place from exhaustion—it had nearly disappeared, what remained being not larger or less than a small orange. The hard tumor on the right side was seemingly not affected by the vomiting. The external genitals became so swollen as to make further examination in that direction impossible. No examination was permitted after death.

Not having seen a similar case reported in any current literature, I deem it of sufficient interest to present it for record. Of the type of the disease there can be no doubt, nor can there scarcely be a question that its termination was as described. The mode of its ending was certainly unique, especially with reference to the evacuation of the tumor, this phase of the disease being the main point in which the interest of the case lies, and in the absence of an autopsy the course it pursued may be assumed as correct.

A very "remarkable case" is reported by Emmet in his *Principles and Practice of Gynecology*, p. 810, Case LIX., of rupture between an ovarian tumor and the stomach. An operation had been begun for an ovarian tumor, and after the parts had been separated, he says "a condition was discovered unique and I may say startling, on account of the difficulties presented. The stomach, colon, and omentum were all adherent to the surface of the tumor and below the line of the umbilicus, while the whole upper portion of the tumor was covered by peritoneum, placed on the stretch by the displaced organs. The tumor was enclosed by viscera at every point within reach except just below the bladder, nearly to which the omentum extended. The empty stomach and colon lay on the surface of the tumor, resembling

wet pathological preparations and were adherent by the whole surface in contact. Notwithstanding it was suggested that the tumor might be removed from above, . . . I closed the incision as soon as possible. The woman was placed in bed and began to vomit violently, apparently from the effects of the ether. Rupture took place between the stomach and the tumor, and in the course of several hours the tumor was entirely emptied of its contents. The fluid and semifluid substances were almost sufficient to fill two buckets." I quote this to show that rupture may take place between an ovarian cyst and the intestines or stomach by adhesions even in non-malignant or benign diseases of these parts.

Malignant diseases of the uterus and of the ovaries are not uncommon, and there is no fact better established than that they sooner or later end fatally. They always, however, attract the interest and tax the skill and patience of those who are called to treat them; and there is no class of affections more worthy of our study either pathologically or in the way of treatment.

1211 F STREET, N. W.

MEDICAL PROGRESS.

LAPAROTOMY FOR INTESTINAL OCCLUSION.—At a meeting of the Société de Chirurgie de Paris, held March 25, 1885, M. Jenner read the history of a case reported by DR. JEANNEL, in which laparotomy was performed for intestinal occlusion upon a man suffering from chronic enteritis. The patient was fifty-three years of age, and for two days had suffered from severe colic. Five years previously he had experienced an attack of enteritis, which became chronic, and had ever since persisted. When first seen by M. Jeannel his condition was extremely grave. The abdomen was retracted, and the region of the right iliac fossa was painful and swollen. Temperature 99.5° F.; pulse 80; urine scanty. No evidence of hernia. Diagnosis was made by exclusion of intestinal occlusion, and operation was decided upon and performed under antiseptic precautions. Incision was made in the linea alba from a little below the umbilicus to within two inches of the symphysis pubis. On opening the peritoneum no evidence of peritonitis was found. To facilitate examination, the incision was enlarged so as to permit the introduction of the entire hand. There was now discovered a portion of the small intestine, empty and retracted to about the size of the little finger, and about ten inches long, which was constricted by peritoneal adhesions extending from the abdominal wall to the iliac fossa, intestine, and mesentery. No constriction sufficient to explain the occlusion was discernible. M. Jeannel accordingly broke up the peritoneal adhesions, washed the intestine with carbolyzed water, returned it to the abdomen, and closed the wound with six deep and eight superficial sutures. The day following there was much flatus and one movement of the bowels. Notwithstanding the complications which supervened—inflammation of the wound and pneumonia—the patient survived and completely recovered, and no further trouble from peritonitis or intestinal occlusion was experienced.—*L'Union Médicale*, March 31, 1885.

CONSIDERATIONS UPON THE PATHOLOGY OF THE STOMACH.—HEINRICH SCHELLHAAS, in the *Deutsche Archiv für Klin. Medicin*, April, 1885, in a study upon the pathology of the stomach, enumerates the following propositions:

1. Methyl-anilin-violet, tropæolin, carbol-ferric-chloride, are agents of positive value for the determination of free hydrochloric acid as well as of certain organic acids.

2. The several reagents were applied for the determination of the separate acids, with different results. For the estimation of free hydrochloric acid, methyl-anilin-violet and tropæolin are recommended, while for a test for lactic or butyric acid, ferric-carbol-chloride is to be preferred, but the other reagents must be applied as control tests.

3. The absence of free hydrochloric acid in dilatation of the stomach produced by pyloric carcinoma, is produced by the carcinoma *per se*; or the coexisting anæmia, the gastric catarrh, or the disease of the mucous membrane produced by the carcinoma, may be considered as causal.

4. Free hydrochloric acid may also disappear during fever, more frequently it fails (occasionally), or is found in combination with organic acids during attacks of nervous dyspepsia.

5. In dilatation of the stomach not occasioned by carcinoma ventriculi, the lactic or butyric acid frequently existing may nearly always in a short time be removed by washing out the stomach.

6. The danger of increasing dilatation by foods remaining in the stomach after digestion must be met by regular washing out of the stomach.

7. In patients with gastric affections in whom free hydrochloric acid is present, artificial experiments show that digestion is impeded as well in the stomach as in artificial apparatus for digestion, by the addition of ten per cent. alcohol.

8. Digestion which has already been disordered by carcinoma ventriculi appears to be entirely abolished by the addition of even the slightest quantity of alcohol.

MUSICAL MURMURS IN VALVULAR DISEASE OF THE HEART.—DR. P. PUCCI in reviewing a case in which these were heard, says:

1. Musical murmurs of the heart, though rarely heard, have long ago been noticed.

2. Their origin is due to the presence of a body which vibrates in the cavity of the heart, and the perforation of the valve reveals the presence of this vibrating body.

3. Oscillation of the venous blood may aid in rendering the vibrations more intense.

4. As to the mechanism of the origin of the murmurs, there is similarity between them and sibilant râles.—*Gazzetta degli Ospitali, Supplemento*, April 5, 1885.

PARALYSIS OF THE BLADDER CONSECUTIVE TO THE USE OF CARBOLIC ACID IN SURGICAL DRESSINGS.—CARTAZ, in the *Gazette méd. de Paris*, 1884, No. 42, reports interesting cases of vesical paralysis due to the use of carbolic acid in surgical dressings. This is one of the various toxic effects of the acid, and has been observed by the writer only twice, occurring in the first instance after irrigation of the uterus with a two per cent.

solution of carbolic acid after abortion. The paralysis disappeared on the substitution of corrosive sublimate as a disinfectant. The second instance was met with in the case of an aged woman with fracture of the neck of the femur. The dressings, which were daily changed, were treated with a five per cent. solution of carbolic acid. In two weeks there was enormous distention of the bladder, and for forty-eight hours the woman had not urinated. By the catheter about a quart of dark-brown urine was evacuated. In four days the paralysis disappeared, the carbolic solution having been replaced by boracic ointment. There appeared no reason to doubt that in each case the paralysis of the bladder was caused by the drug in question, as in both patients the urine had the color characteristic of carbolic acid poisoning, and the symptoms of paralysis in each case disappeared on abandoning the use of the drug. Only two similar cases are reported, and in these vesical paralysis resulted from drinking a concentrated solution of the acid.—*Centralbl. für Chirurgie*, March 28, 1885.

THE SUCCUSSON OF LIQUIDS IN THE STOMACH.—DR. A. RUBINO gives the following *résumé* of his investigations on gastric succussion:

1. The sounds (succussion) in the stomach produced by digital impulse from light and rapid blows, are hydro-pneumatic in their origin.

The analogous sound obtained by Hippocratic succussion has the same significance, but is of less semeiological value than the first mentioned, which enables the exact determination of the volume of the stomach—a result impossible with the second.

2. The sounds of gastric succussion may be considered physiological when present under the following conditions:

(a) They should not be perceived when palpation is made below a horizontal line passing through the union of the cartilages of the ninth and tenth ribs.

(b) They should not be perceived more than two hours after ingestion of liquids, or more than six hours after partaking of mixed diet.

3. With these exceptions, gastric succussion is an index of a diseased condition consistent with gastric inertia, with or without gastric dilatation.

(a) When the sounds are heard in the normal region more than two hours after partaking of liquid food, or more than six hours after ordinary diet, it is a symptom of gastric inertia without dilatation.

(b) When the sounds are heard longer than normal and below the line indicated, it is a sign of dilatation of the stomach.

4. In some cases dilatation of the stomach may exist and, nevertheless, succussion sounds be not recognized; a condition sometimes observed in phthisical patients suffering from vomiting.—*Gazzetta degli Ospitali, Supplemento*, April 5, 1885.

VAGINAL EXTIRPATION OF THE UTERUS.—DR. MARIO GIOMMI, on the 19th of February, operated upon a woman aged 36 years, for cancer of the cervix by the method of vaginal extirpation of the uterus. Notwithstanding strict antisepsis and every attention to minute detail, the patient was attacked the third day by peritonitis, to which she succumbed one week after the operation.—*Gazzetta Medica di Torino*, April 5, 1885.

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SATURDAY, MAY 16, 1885.

PUMP-WELLS AND IMPURE WATER.

THE apprehension of an outbreak of epidemic disease during the coming season has had the effect of directing attention prominently to the great risk incurred by the use, for domestic purposes, of water contaminated by putrescent organic matter discharged into the soil from numerous sources always existing in inhabited places, and already, in a number of localities, measures have been adopted for averting this cause of danger to the public health. Of the 300 pump-wells existing in Brooklyn in 1882, less than 100 remain at the present time, and as most of these have been condemned by the department of health as furnishing water which is unfit for human consumption, they will doubtless be soon abandoned. In St. Louis, the pollution, by the drainage from the numerous cesspits which still remain in that city, of well water used for domestic purposes has excited public alarm, and measures are being discussed for the remedy of the evil.

Col. Ludlow, the Chief Engineer of the Water Department of Philadelphia, has furnished the Board of Health with a list of over 1000 pump-wells and other local sources of supply in the city, which, from their surroundings, are deemed incapable of furnishing pure water. A large number of these wells have already been condemned and ordered to be abandoned, and, in all probability, similar action will be taken with regard to most of those yet to be examined. By far the greatest number of wells are located in the suburban wards, though in thickly populated localities; scarcely any of them are to be found in the old city proper. Originally, they were depended on as the only source of supply; but notwithstanding the city water is now, in most cases,

made available, the people still prefer to use the well water on account of its clearness, coolness, and palatability, qualities which cannot be regarded as a test of the wholesomeness of a water.

It is a well-known fact that the ground-water underlying an inhabited district is almost invariably polluted. Leaching cesspools and privy-wells, leaking sewers and drains, stable yards, graveyards, and soakage from defiled surfaces, all contribute to its contamination. The domestic use of water derived from the drainage of a soil saturated with foul organic matter, particularly that of fecal origin, is known to be a frequent means of communicating disease, and the disgusting practice should be exposed, condemned, and prohibited wherever practicable.

The custom of disposing of sewage and of providing for a water supply upon the same premises is more common in towns and villages than in cities, and not infrequently local outbreaks of disease, such, for example, as typhoid fever, have been traced to this fault. The devastating epidemic of typhoid fever now prevailing in the mining town of Plymouth, Pa., is attributed to the use of water contaminated by typhoid excretions. Cholera may be propagated by this same filthy mode of infection. The active measures in sanitation which are being pressed at the present time throughout the country, should embrace, as a leading feature, the investigation of the water supply in every case in which there is a suspicion of its pollution. It should be borne in mind that the ground-water, from which shallow wells are fed, is almost invariably polluted in inhabited places, and that no precautions that may be taken in sinking wells can be depended upon as securing a safe supply.

UTERINE ERYSIPELAS AND ITS EXTERNAL AND INTERNAL IRRADIATIONS.

At a recent meeting of the Paris Obstetric and Gynecological Society, a paper upon uterine erysipelas and its external and internal manifestations, by BERNUTZ, was presented, which appears in the April number of the *Archives de Tocologie*. In the three cases reported, the erysipelas had its origin in the uterine mucous membrane, and thence extended to adjacent parts; two of the patients had been recently delivered, while the other had not been pregnant for three years. One of the former was attacked ten days, the other the seventh day, after delivery, and in each the disease extended from the uterus to the vulva and adjacent parts. The third patient entered the hospital because of severe metrorrhagia, and was placed near a woman suffering with facial erysipelas. In this patient the erysipelas extended from the uterus not only to the external genital organs and adjacent parts, but also to the oviduct and thence to the peritoneum. While this patient had erysipelas in one ward, three puerperæ in an

adjoining ward, separated only by a vestibule, had septicæmia, all three dying.

In the discussion, Doléris held that the inflammatory complications of surgical wounds, lymphangitis, and erysipelas in all its varieties, are found with very analogous characters in the newly delivered—that is to say, coinciding with septicæmia. In addition to clinical observations proving the close relationship between puerperal septicæmia and erysipelas, Doléris called attention to the fact that he had, in 1880, first proved the morphological and physiological identity of certain septic germs found in the two diseases. But he justly remarks that nothing is so vague as the word septicæmia, nothing more difficult than to point out precisely the nature of the poison. The essential thing is not the determination, impossible in the present state of science, of a specific organism for each of the innumerable varieties of infection, but of the indisputable position of the role of the essential pathogenic element, the microbe; for it is from this position that useful prophylaxis and treatment come.

Pajot stated that he had seen two epidemics of puerperal fever, in one of which fifty-six women died and in the other forty-six attacked were all cured. He rejected quinine in the treatment of the disease, and while declaring himself a firm believer in the microbial doctrine, he thought that one should not forget the patient, the different individual predispositions, and even the influence of exterior conditions, temperature among others.

Guérin held that there could not be purulent infection nor septicæmia without microbes; he referred to the marvellous results obtained by the cotton dressing, which filtered the air, thus preventing septicæmia by closing the entrance to microbes. In regard to the use of quinine in septicæmia, he strongly advocated it, stating that there was a remarkable tolerance of the remedy by the disease, and that in one case he had given fifteen drachms in the course of the illness.

It has been held by many distinguished authorities that erysipelas and puerperal fever are identical in nature. That there is a close relationship between the two cannot be doubted when we remember the following facts: The prevalence of the two diseases at the same time in the same places; a fact by no means constant, but which has been frequently observed: the liability to septicæmia of a woman attended in her labor by an obstetrician who is also attending a case of severe erysipelas, or cared for by a nurse who comes from nursing a case of erysipelas; this liability also exists if the puerpera be in a hospital where erysipelas is present: women who have attended to the bodies of those who died of puerperal septicæmia have been attacked with erysipelas. Dr. Churchill, among others, has shown that in many instances the infants of women suffering with septicæmia are attacked with erysipelas. That these accidents may in

many cases be prevented, now that the germ origin of each disease is prevailing in the professional mind, there is abundant reason to believe. If this doctrine had been known in the past, how many thousands of lives might have been saved! That some other diseases bear also a close relationship to puerperal septicæmia is also admitted—the germs may be different, but they may be in a common medium, and be conveyed by a common vehicle.

While writing these lines we have visited in consultation a multipara suffering with septicæmia. The physician who attended her has not seen a case of septicæmia for years previously, he has not now nor has he had recently a case of erysipelas, but the patient occupies a room in which two of her children were sick with diphtheria between one and two months since.

PELVIC SPINA BIFIDA.

IN *Gaillard's Medical Journal* for March, 1885, Dr. T. GAILLARD THOMAS describes two extraordinary cases of spina bifida, occurring in women, aged, respectively, twenty-eight and nineteen years, in which the cavity of the sacrum was filled by an adherent cyst. In the first case nothing was done, and the patient was lost sight of; but in the second, operative interference occasioned death. Aspiration of the sac was attended with the escape of eight ounces of a clear, limpid, non-albuminous fluid, and was followed by severe headache, elevated temperature, and a rapid pulse. At the expiration of six months, the cyst was incised and its walls attached to the vaginal opening. Tetanus and other grave symptoms having set in at the end of twenty-four hours, Dr. Thomas suspected that he was draining a sacral spina bifida, and at once sewed up the opening, but death ensued in twelve hours more from heart failure. A post-mortem examination was not obtained.

Although there is no pathological proof in these cases that the sac was formed by the membranes of the cord projecting through a deficiency in the sacrum, the peculiar symptoms occasioned by the evacuation of the cyst in one, and a similar case narrated by Emmet in his *Principles and Practice of Gynecology*, render the view that Dr. Thomas was dealing with a spina bifida extremely probable, and should put the practitioner on his guard in dealing with cysts in the hollow of the sacrum.

In the case of Dr. Emmet, that of a woman thirty-six years of age, a soft, fluctuating cyst filled the sacrum, and was firmly adherent to the sacral prominence. The aspirator evacuated a clear, limpid, non-albuminous fluid, and death occurred from uræmic poisoning at the end of several days. On post-mortem examination, a cyst, which contained upwards of three quarts of fluid, completely filled the cavity of the pelvis; the three lower bones of the sacrum were deficient on the right side; a funnel-shaped opening

communicated with the spinal canal; and a network of nerves was spread over the inner surface of the sac.

TUBERCLE OF THE TESTIS.

At the recent Congress der Deutschen Gesellschaft für Chirurgie, the proceedings of which may be found in the Berlin Medical weeklies for April, VOLKMANN, of Halle, read a most important paper on tubercular disease of the various organs and tissues, in which he took the ground, now generally accepted, that, whenever it is practicable, the removal of the diseased part should be practised with the view to prevent general infection.

In the discussion which followed the reading of the paper, there was, however, some difference of opinion in regard to the localization and treatment of tubercle of the testicle, which is worthy of notice. Volkmann himself teaches that, in young subjects, castration should be resorted to, in preference to cauterization, partial resection, and scraping, as soon as possible or before the cord is involved, and the disease has extended to the prostate or bladder. In many cases in his hands castration has been followed by a permanent cure, thereby showing that the affection was limited to the testis itself.

Von Langenbeck, on the other hand, was very positive in his statement that castration was unjustifiable in young persons; that good results were attainable by the employment of antiscrofulous remedies; that castration did not prevent recurrence; and that the enucleation of the diseased lobules was the only surgical measure demanded. Gueterbock stated that he had never seen isolated tubercle of the testicle, but that it was always associated with similar disease of the prostate, bladder, or kidney. He also was opposed to castrating children. Schede, however, held that castration is the best remedy to effect riddance of the disease; but he thought that in many cases the same end can be accomplished by free incision and scraping out the tubercular tissue.

Unless we greatly mistake, we fancy that the majority of surgeons hold the same views as Volkmann as to the infectious nature of tubercle, and support him as to the propriety of the operation of castration, no matter what age the patient may be.

OBSTETRIC PALPATION.

COMPARATIVELY little attention has been given in this country to the subject of obstetric palpation. American contributions to it have been very few, and we fear that in many of our medical schools obstetric teachers devote little time to its exposition, or omit all reference to it—treat it in fact, as all English text-books upon obstetrics do. Yet the importance of the subject cannot be easily exaggerated. It not only enables the diagnosis of pregnancy in many doubtful cases to be made, but may permit

one to determine whether the pregnancy is single or multiple, and the presentation and position of the fœtus. Approximately at least one who is reasonably expert in obstetric palpation can decide the duration of the pregnancy, and in case some obstruction of the birth canal may render the induction of premature labor necessary, the time for this may be fixed by measuring the length of the fœtus, and thus approximating its size.

In a most admirable paper upon the subject read before the Philadelphia County Medical Society by DR. ALBERT H. SMITH somewhat more than a year ago—a paper that unfortunately has not been published—this eminent and experienced teacher, remarked in regard to obstetric palpation: For ten years past it has been carefully and systematically taught in every medical school in Europe, being held of as much importance in obstetric diagnosis as vaginal touch in gynecology, or auscultation in the affections of the thorax.

Probably one reason for the neglect of obstetric palpation by teachers has been that it was neglected altogether, or only imperfectly considered, in the text-books used in this country. A brief, clear exposition of the subject in a suitable manual, however, has recently been supplied by Dr. L. E. Neale, of the University of Maryland, who has translated Pinard's well-known treatise upon "abdominal palpation as applied to obstetrics." In a small volume of less than a hundred pages the medical teacher and the medical student can find the subject clearly, plainly, and succinctly presented. The time has gone when any obstetric teacher can fail to instruct his students upon this subject, and do justice to them.

IODINE IN THE NASCENT STATE IN UTERINE CATARRH.

THE treatment of catarrh of the cervical canal is often tedious and unsatisfactory, and hence we take pleasure in mentioning a new and apparently quite rational method of meeting this affection. Dr. Brondel, in *Revue Médico-Chirurgicale des Maladies des Femmes*, mentions a case of sterility resulting from cervical catarrh, and the successful treatment of the disorder, and states that iodine is the only remedy which gives satisfactory results. He considers that the best way of using the medicine is in its nascent state, as advised by Chéron. The method is as follows: Add two drachms and a half of iodide of potassium and fifteen grains of iodate of potassium to two ounces of water; then, by means of a rod wrapped with cotton dipped in the solution, apply it to the cervical canal; following this application by that of a solution of citric acid, two drachms and a half in two ounces of water,—similarly made. The citric acid solution immediately liberates iodine, and the latter in its nascent state is thus in immediate contact with the diseased part.

SOCIETY PROCEEDINGS.

THE AMERICAN MEDICAL ASSOCIATION.

Thirty-sixth Annual Meeting, held at New Orleans, April 28, 29, 30, and May 1, 1885.

(Specially reported for THE MEDICAL NEWS.)

SECTION ON SURGERY AND ANATOMY.

TUESDAY, APRIL 28TH.—FIRST DAY.

DR. DUNCAN EVE, of Nashville, Tennessee, Chairman, called the Section to order.

DR. JOHN B. ROBERTS, of Philadelphia, read a paper on

FALSE DOCTRINES IN THE TREATMENT OF FRACTURES.

The first custom to which he referred was that of bandaging the limb previous to the application; this is unnecessary. The great point in the treatment of fractures is, not the kind of dressing that is used, but simply the keeping of the parts at rest. Very little ensheathing callus is formed if the parts are held in coaptation. This is proved by post-mortem examinations. The greatest point of dispute is when to begin passive motion. Where the fracture involves the joint, it is important that careful passive motion be commenced at as early a period as possible. Where the joint is not involved there is no need of passive motion and hence it may be delayed, and in his opinion should not be commenced sooner than the fifth week. Passive motion should never be made while acute arthritis is in progress. Again, splints are frequently worn too long. In simple fracture of the lower extremities, the patient should be able to go to his business within three or four weeks after the receipt of the injury, provided a gypsum or other light dressing be applied after the original dressing has been removed. In simple fractures of the fibula, one week of confinement is all that is necessary. In compound, or otherwise serious fractures, a much longer period is required.

Another erroneous view is that which opposes the conversion of simple fractures of the cranium into compound, where the case is obscure and an accurate examination cannot otherwise be made. The danger of the wound is rendered little if at all more serious, and a definite diagnosis can be made.

Another error is in the treatment of fractures of the nasal bones by the application of splints or adhesive strips. The proper method of holding the fragments in apposition is by transfixion with pins. Another error in this connection is the placing of canulæ in the nasal cavities to aid in holding the fragments in position. All of us would prefer breathing through our mouths to breathing through these filthy tubes, which soon become filled with mucus and very offensive, as well as giving rise to a nasal catarrh. Deformities of the nasal bones and cartilages have often become permanent from want of proper surgical treatment. The importance of this feature of the facial line renders its proper study necessary.

The important factor in the treatment of fractures of the clavicle is to apply such a dressing to the sternal end of the bone, as shall prevent it from sliding forward as it would do from the weight of the upper extremity. This is to be accomplished by extending the angle of

the scapula, and not by the wearing of an axillary pad, which cannot succeed in holding the bone in position, unless the pad be so large as to render its use unadvisable.

The use of the angular splint for fractures about the surgical neck of the humerus is an error, because it cannot control the movements of the arm, and every such case acts upon the fracture and not upon the joint, since there is nothing to prevent the upper fragment from remaining quiet while the lower is in motion. It is better to use the thorax as a splint, and to place the arm across the chest, binding it in this position, and thus preventing a separation of the fragments, and using no splint on the outside. The fallacy of treating the fractures about the condyles of the humerus, extra-condyloid, intra-condyloid, etc., by using anterior and posterior splints is apparent when considered. The loss of the "carrying" function of the arm is a common experience. By this loss, I mean the loss of the obtuse angle which we all have between the humerus and the forearm.

In fractures about the middle of the forearm, interosseous pads are seldom required if the fragments are put into accurate apposition, and the arm carried in the prone position.

Another error is the use of the straight splint in fractures of the lower third of the radius. The inner surface of the lower end of the radius is concave and requires a convex splint. The straight splint will do very well for the external surface of the arm, but not for the internal. In many cases reduction without the application of any splint at all will give better results than the application of a splint of any pattern. The teaching with regard to the treatment of fractures of the metacarpal bones is not universal, but it is prevalent. In most cases the fracture can best be overcome by placing adhesive strips over the part attached to the fingers and to a splint placed under the hand, and, if desired, projecting a little beyond the ends of the fingers.

Finally, it is an error to rely upon measurements of the lower extremities for the estimate of the result obtained from our treatment of fractures. It is surprising that although the fact that the extremities differ greatly in length, has been repeatedly brought to the attention of the profession, it is an almost universal custom for surgeons to measure their broken limbs. Very often, too, where there is no natural difference, there is an apparent one from the position of the pelvis when the measurement is taken.

DR. W. F. PECK, of Iowa, stated that it had always been his experience, that it is impossible to pass a tube of any size, even a catheter, into the nasal cavity, when the bones are fractured. The best instrument for this purpose is a conical-pointed director. With reference to fractures of the condyles of the humerus, he had for fifteen years taught the importance of using no splints except for support. He then reported the case of a child whose fracture of the condyle of the left arm he had treated by simply placing it on a pillow at rest, and performing passive motion every day after the third. The result was perfect recovery without deformity.

DR. MUDD, of St. Louis, remarked that the motion of the fragments of a broken bone is largely limited by the tissues surrounding it, and hence the movements of the extremity will be made largely at the expense of the

fractured surface. Passive motion is an aid to the production of ankylosis if practised at any time before the parts have become solid enough to resist the muscular movements. The great point to be desired is the limitation of inflammatory action about the seat of fracture. Control that, and you control the amount of ankylosis of the joint. Put the fragments into good apposition, control the effusion into the joint, and prevent movement, and you get a good result. In fractures of the metacarpal bones, put the parts in position, put the pad near the joint, put on a splint, and bandage it firmly. This is enough to control the fragments. For sake of motion, the splint may be cut short.

DR. E. P. COOK, of Illinois, stated that in fractures of the lower end of the radius, the application of the posterior splint is all that is necessary. One case of this kind he had treated by applying a closely fitting kid glove to the hand, and a close bandage over the fracture, with direction to lay the arm on a pillow in any position that was most comfortable. The result was perfect. But the question in his mind was whether he was justified in going on and treating all fractures in the same manner.

DR. ROBERTS stated that he had not attempted to bring out anything new, but merely to present some of the more common errors for discussion. He agreed with Dr. Peck that many fractures would be better treated without any splints than with the ordinary splints. He further thought that the condyloid fractures of the humerus are best treated in the extended position instead of the flexed, either with or without splints. This he then demonstrated on the board with reference to fractures of the condyles of the humerus, where he showed that the ulna is forced back so as to bear an improper relation to the humerus. In fractures of the upper end of the humerus, he believed it better in most instances to let the arm hang vertically. Sometimes, however, it is better to let the arm fall forward. In many cases we need no splint at all. If we reduce the fracture, the interlocking of the fragments will ordinarily keep the fracture in place. If the fracture is comminuted, however, it should be treated by splints.

DR. W. P. VERITY, of Chicago, next read a paper on
THE TREATMENT OF FRACTURE BY WIRING OF BONES
AND FREE DRAINAGE.

He claimed nothing strictly original for his paper, but thought that the combination was worthy of consideration. The wiring of fragments must be done in a thoroughly antiseptic method. The disinfection of the wire and its thorough flexibility can be secured by heating it to a white heat. A drainage-tube is used and thorough irrigation accomplished. Eight cases were reported, in which he had employed his method with the most unvarying success. In some the protruding fragments of bone were sawn off, the fragments adjusted, wired together, drainage-tubes inserted, and the wound dressed antiseptically. Even where the periosteum had been removed, this method prevented the destruction of the bone, which seemed to retain its vitality and remain vascular. Adjourned.

WEDNESDAY, APRIL 29TH.—SECOND DAY.

The Secretary, Dr. C. B. King, of Allegheny, Pa., being absent, DR. P. E. ARCHINARD, of New Orleans, was appointed to act as Secretary.

DR. H. O. MARCY, of Boston, presented a paper entitled

"DO WE FIND A HITHERTO UNSUSPECTED DANGER TO SURGICAL LESIONS FROM MICROORGANISMS IN ENCLOSED CAVITIES?"

He reported three interesting cases in which microorganisms were found in the abdominal cavity.

The first case was one of rupture of a cyst of the ovary following a fall; death was caused by general peritonitis forty hours after the accident. The abdominal effusion consisted of about three quarts of milky fluid, contained micrococci and large bacilli, resembling the anthrax bacillus, and were reproduced by culture.

The second case was one of a large compound ovarian cyst of rapid growth with thin walls, operated on in his private hospital. During the operation, one of the cysts ruptured, and its contents escaped into the abdominal cavity. The peritoneal cavity was washed with a 1:1000 solution of bichloride. Death, however, occurred in seventy-six hours, from septicæmia. The autopsy revealed no evidence of peritonitis; there were about two ounces of reddish serum in Douglas's cul-de-sac. This fluid was swimming with micrococci, and in one of the unruptured cysts the same micrococci were found, which were reproduced upon cultivation.

The third case was one of peritonitis in a child aged 4½ years. The abdomen being aspirated, a pint of creamy fluid containing an abundance of micrococci, which, when cultivated, reproduced in pairs—was withdrawn. Later, an exploratory incision was made, and two quarts of fluid removed. The abdomen was washed with a mercuric chloride solution, and closed without drainage. On the twelfth day after, a spontaneous opening occurred, and a considerable quantity of purulent fluid escaped. From that time, the patient made an uninterrupted recovery.

Dr. Marcy asked the following questions suggested by his cases: Are ovarian cysts to be considered no longer closed sacs? How can bacteria enter the unopened abdominal cavity? Have we in cystic fluid a hitherto unsuspected danger?

Most observers have failed to discover micrococci in cystic or abdominal fluid. Experiments show that micrococci may be introduced in the circulation and eliminated by the kidneys without injury; but when there is a blood stasis, as after contusion or local injury, then in certain lowered conditions of the economy we have both the seed and soil for the development of these organisms. This might explain the reason why bacilli were found in the first case, but it would not meet the second case, which was one of an old ovarian cyst.

DR. W. A. BYRD, of Illinois, stated that these cases reminded him of an interesting case he had in 1882, and which he saw with Dr. Beck, of Illinois. The patient was a negro woman with a cystic abdominal tumor on right side; he diagnosed cyst of right ovary and aspirated three pints of fluid from it. A few days after she had what resembled malarial fever; thinking that it might be best to remove the tumor, he subjected her to the operation after she had rallied from the attack. He opened the abdominal cavity, but found no trace of tumor. The whole peritoneum was studded with millet-seed growths looking like tuberculosis; after making a thorough examination he closed the cavity and in doing

this had a good deal of trouble in bringing the edges of the incision together. The woman made a perfect recovery. The only diagnosis he can suggest for the case, is that it was a hydatid cyst of right ovary which was afterwards absorbed.

DR. BECK, of Illinois, said that some time ago a lady consulted him with what he diagnosed as a large simple cyst of the ovary; there were no complications, the uterus was of normal size. He advised operation, and she had returned home to make preparations for it. One week after he was telegraphed that his patient was dying. He immediately went to the case, and upon examination found that the tumor was gone; there was general swelling of the abdomen. The history he obtained was as follows: On the preceding night the husband had attempted to have intercourse with his wife, and his weight coming down suddenly on the tumor had caused it immediately to disappear, the lady complained of great pain, and was almost collapsed, in which condition Dr. Beck found her. She however recovered.

DR. N. SENN, of Milwaukee, Wis., then read a lengthy and highly interesting paper on

THE SURGICAL TREATMENT OF CYSTS OF THE PANCREAS.

After relating a well-observed and studied case which he had treated by five incisions and which resulted in cure, he gave a minute history of the literature on the subject and referred to a number of published cases, and offered the following conclusions:

1. Cysts of the pancreas are true retention cysts.
2. Cicatricial contraction or obliteration of the common duct or its branches and impacted calculi, are the most frequent causes of cysts of the pancreas.
3. A positive diagnosis of a cyst of the pancreas is impossible, a probable diagnosis between it and some other kind of cysts, amenable to the same surgical treatment, is adequate for all practical purposes.
4. The formation of a pancreatic fistula under antiseptic precautions, recommends itself as the safest and most expedient operation in the treatment of cysts of the pancreas.

DR. JOSEPH RANSOHOFF, of Cincinnati, then reported the history of

TWO OVARIOTOMIES ON THE SAME PATIENT, which will appear in full in an early issue of THE MEDICAL NEWS.

DR. REED, of Ohio, said that assisted by Dr. Craig, he had removed an ovarian tumor of twenty-five pounds, together with the right ovary, from a woman, and that two years later he had, for the same woman, removed the left ovary with a tumor weighing twenty-eight pounds. He had found the abdominal walls much thinner at the second than at the first operation. The patient recovered, and six months after the second operation married; she has never had a child.

DR. WARREN, of New York, stated that his preceptor had always been in favor of removal of the ovaries in two operations rather than to take them out both at one time. It was pleasant to him to see that modern surgery, as shown by the statistics of Dr. Ransohoff, had come to the same conclusion. He thought himself that it was much better not to remove both glands in one op-

eration, unless they were both found extensively diseased and enlarged.

DR. CHARLES GRAEFE, of Sandusky, Ohio, reported a case of

GIANT GROWTH OF BOTH LOWER EXTREMITIES.

The patient is a young woman of 25 years, of English parentage, who presents an enlargement of the two lower extremities. This enlargement, which is congenital, seems to consist of hypertrophy of all the soft tissues of the parts, together with the bones, as far as it can be ascertained by palpation. The right extremity is larger than the left. The case has been pronounced one of Elephantiasis Arabum, but it differs from that disease in being congenital.

DR. R. H. JENKINS, of Hogansville, Ga., reported a case of *Chronic Necrosis of the Tibia and Fibula of Ten Years Duration*, cured by amputation at the thigh. Accompanying the report were the bones, which were very good specimens of the condition referred to, and form valuable specimens.

THURSDAY, APRIL 30TH.—THIRD DAY.

DR. A. Y. P. GARNETT, of Washington, read a paper on COLO-PROCTITIS TREATED BY THE HOT WATER DOUCHE. AND STRETCHING OR DIVISION OF THE SPHINCTER ANI.

He stated in introduction that he fully recognized the importance of confining himself to the single class of cases indicated by the title and described in the cases reported. Whilst the disease under consideration is usually of long standing, or chronic in its character, it is a pure non-malignant inflammation confining itself entirely to the mucous or submucous tissues, and resulting in some cases in small superficial necrobiotic ulcerations found just within the external sphincters; that such cases are often mistaken for simple dysentery and unwisely treated by injudicious medication as such. Five cases were then reported. The first was of a man previously healthy until two years before coming under observation. During that time he suffered severe pain in the rectum. Examination showed chronic catarrh of rectum, not extending to the colon. An enema of four ounces of a decoction of ipecac with twenty drops of tincture of opium to be used as hot as possible every eight hours, except from midnight to morning. Improvement followed, but the mucous membrane was found thickened and covered by long villousities, vascular and soft. The sphincter was dilated, the villousities removed by scraping, and hot water injections continued. Recovery was complete in fifteen days. In the second case the rectum was too sensitive to permit examination. The sphincter was divided by the knife, the rectum stretched. The patient was greatly relieved almost instantly. At the end of eight days she was discharged cured. The third case had been operated upon for hemorrhoids. A firm constricting band was found just above external sphincter. There was no sign of malignant disease. The hot water douche was used, the sphincters dilated under chloroform, douches were continued, the diet of hot milk ordered, and recovery followed. The two other cases were similar in character, and treated by the methods illustrated in the cases narrated with the same excellent result.

DR. W. W. DAWSON, of Cincinnati, inquired how the author gave hot milk as a diet in the cases which he had reported.

DR. GARNETT replied that he gave it in the quantity of four ounces every four hours and as hot as possible. He stated further that the English surgeons of late leave their patients almost entirely to hot milk.

DR. DAWSON then continued that these are indeed instructive cases. He had had some experience in this affection. He had had the best successes, however, from the use of the knife, liberally dividing all the transverse fibres up as far as the internal sphincter. He then narrated a case that came under his observation after having been under the care of Dr. Van Buren, of New York. He expressed the opinion that the reflex trouble would never be overcome without a division of the circular fibres. The patient, who was a physician, thought that he could stand the operation without ether. As soon as the knife was introduced the patient jumped, and only half the fibres were divided. He thought he was better and notwithstanding his protest, he went home. In a short time he returned and submitted to a complete division of both internal and external sphincters from within outward, under ether. In twenty-four hours that man was entirely changed. He had for years been unable to attend to business on account of the painful affection, but he was already somewhat relieved. In a short time he was back to business and is now robust and healthy. He had succeeded also with the method of Dr. Garnett, but he thought there were cases in which nothing short of a radical operation would relieve the patient.

DR. JOSEPH RANSOHOFF, of Cincinnati, considered the most important feature of the paper the fact that the author had recognized at once the character of the case—that he had located the trouble at once in the rectum. It is a strange fact, that in most of these cases of rectal disease, the pain is not limited to the rectum, but extends also to the transverse, and even the ascending colon. The conditions in the cases reported are not analogous. He thought that, from the description, the first case was one of rectal papillomata. It is not an uncommon, but one of the most incurable affections of the rectum. The condition is analogous to some conditions of the bladder. Everyone has seen cases in which malignant disease, or the presence of stone, enlargement of the prostate, can all be excluded from the etiology of vesical irritation, and yet division of the bladder is the only cure. In similar conditions of the rectum, as we have been shown, division causes absolute rest. Why is it that we have this intense pain when there is little or nothing in the rectum?

DR. W. F. PECK, of Iowa, remarked that there is very little in the text-books about the size of the rectum or the amount that it should hold. We are directed by good authority that in every matter of doubt as to conditions within the rectum, or even higher up, it is proper to introduce the hand and explore. This direction was carried out by three young physicians of his State. The smallest hand in the party was selected and introduced. Above the third sphincter—which, by the way, very seldom exists—there was found an obstruction. This was removed and the patient relieved, but he recovered with a paralysis of the sphincter. On this account suit was brought for \$20,000 against the man who had had

the privilege of making the exploration. In preparing to testify on the case, he had been surprised to find so little concerning the capacity of the rectum.

DR. DAWSON remarked that immediately after Simon had published the possibility of this method of exploration and had urged its trial, recommending it for safety and accuracy, it was hoped that it would open up a new and valuable field for diagnosis, especially of obscure tumors in the abdomen. It had not, however, resulted in so great advance as was hoped. He did not think that paralysis of the sphincter should be looked for as a result of the procedure. He then narrated a case that came under his observation about the time of the introduction of the method. It was an obscure case, and it was decided to explore the abdominal cavity in this manner. Several gentlemen present introduced their hands, and all thought they could feel the concave surface of the liver and nearly all the abdominal organs with great distinctness. But, on the following morning, like Asa of old, the patient "slept with his fathers."

DR. BYRD, of Illinois, thought that the paralysis of the sphincter may depend upon an ulceration of the mucous membrane about the sigmoid flexure. The rupture of one of these strictures, or the presence of an ulcer would leave a point of irritation which, he thought, might cause the paralysis of the external sphincter.

DR. RANSOHOFF agreed with Dr. Peck, that the third sphincter is rarely present, if he spoke of it anatomically; but, physiologically, this is incorrect. It is the third sphincter that keeps the bowel constantly empty. He further thought that if the examination were properly conducted in the dissecting-room, the third sphincter would be found. The rectum, when distended, is limited in capacity only by the capacity of the pelvis. How often, in the female, do we have to search, even for the uterus, when the rectum is impacted?

DR. OWEN, of New Orleans, presented a case of

A PATHOLOGICAL GROWTH

in the skin of the left temporal region. He stated that, as it had been removed eight times, the last two operations having been performed by himself, and still the tumor returned, he desired the opinion of the Section as to the character of the growth and the proper treatment to be now adopted in the case.

Drs. Kinloch, Dawson, and Warren, were appointed a committee to examine the case and report to the Section the result.

A paper was then read on

AUTOPLASTY

by DR. F. FORMENTO, of New Orleans. He referred to the great advancements that have been made in the numerous branches of surgery within the last half century, and more especially the advance that has been made in this peculiar branch within a few years. So great indeed have been the improvements that it has been made a special department. Autoplasty proper is the restoration of tissues taken from the region of the face by disease or injury. In some instances it implies the taking of tissues from other parts of the same individual or from another. Two cases were then reported in which the cheek and a greater portion of the upper lip had been torn away from the face of a young lady, rendering her not only unsightly, but unable to eat or talk on account of the enormous growth of cicatricial

tissue that had resulted. The jaws could be separated only wide enough to admit the end of the little finger. Eight teeth remained in the jaws, but were forced into an almost horizontal position. The dangers of so extensive an operation as that which would be required for the relief of the case were explained as well as the great possibility of the measure failing. The procedure was, however, urged. The first step was to dissect up all the cicatricial tissue in all directions as freely as possible. The large bands were then removed. A flap large enough to cover the denuded surface was then dissected from the neck, a good amount of adipose tissue being taken with it. This was secured to the denuded surface. Several others had to be taken from the neighboring parts before the surface was covered, for so great was the tension that after the cheeks had been as freely dissected from the bones as possible, they could be drawn so as to cover only about a third of the surface. Sixty sutures were required to retain these flaps. These were removed at different intervals, and on the fifteenth day the patient was able to be out of bed.

The second case was that of a woman in this city who consulted a quack cancer doctor for an insignificant wart upon her nose. Caustics were applied, and when the small wart was removed there was left a large hole in the nose many times as large as the original. This did not heal, but gave her so much pain that the sense of smell was destroyed and the Schneiderian membrane was constantly irritated. In the operation for its relief, he dissected up flaps from either cheek large enough to cover the ulcer, after the edges of the latter had been vivified by scraping with the knife and a spoon. The flaps were closely united, and union took place by first intention. The result was perfect.

DR. KINLOCH, as Chairman of the Committee appointed to examine the case of Dr. Owen, reported that the Committee had coincided in their opinion with Dr. Owen, that the case was one of "recurrent fibroid" tumor, or, as it would be called under the modern pathological nomenclature,

A SARCOMA,

involving the peristomium. It was of slow growth, and in the opinion of the Committee, nothing more should be done in the way of extirpation, and only palliative remedies employed.

Adjourned.

SECTION ON OPHTHALMOLOGY, OTOTOLOGY, AND LARYNGOLOGY.

TUESDAY, APRIL 28TH.—FIRST DAY.

The Section was called to order by Dr. J. A. WHITE, of Virginia, Chairman.

DR. FLAVEL B. TIFFANY, of Kansas City, read a paper on

OSSIFICATION OF THE CHOROID, WITH SYMPATHETIC OPHTHALMIA.

The enucleated eyeball preserved in alcohol was shown to the members.

DR. R. E. MURREL, of Arkansas, read a paper on

DETERMINING ERRORS OF REFRACTION BY DOUBLE IMAGES AND PARALLAX.

His methods are very similar to those made use of by Prof. William Thomson, of Philadelphia, in the

construction of his ophthalmometer and perforated disks.

DR. HERBERT HARLAN, of Baltimore, reported a

A CASE OF HEREDITARY GLAUCOMA.

The mother of the patient had been attacked by glaucoma at the age of nineteen, and was blind from that disease. The grandfather, great-grandfather, and great-great-grandfather had gone blind at an early age, presumably from the same cause. A maternal uncle and an aunt and two cousins had been affected in a similar manner. Dr. Harlan operated and preserved fair vision. There was some little debate. It seemed to be the sense of the Section that perceptible tension was the exception rather than the rule in simple chronic glaucoma.

WEDNESDAY APRIL 29TH.—SECOND DAY.

DR. G. F. FULTON, of St. Paul, Minn., read a paper on

THE RELATIONSHIP OF ERRORS OF REFRACTION TO HEADACHE,

which was a good presentation of the subject. The prevailing tone of the discussion was that though headaches were often caused by errors of refraction, the correction of which gives relief, very many headaches own other causes which the oculist must not overlook.

DR. ST. CLAIR reported a case of

GLIOMA OF BOTH EYES IN AN INFANT.

Although the growth had become extraocular in both eyes, he enucleated one globe and eviscerated the other orbit. Sixteen months after, the child is perfectly well.

Adjourned.

SOUTH CAROLINA MEDICAL ASSOCIATION.

Thirty-fifth Annual Session, held at Charleston, April 21, 1885.

(Specially reported for THE MEDICAL NEWS.)

THE Thirty-fifth Annual Session of the South Carolina Medical Association was held at Charleston, April 21, 1885.

The meeting was called to order by the PRESIDENT, DR. A. A. MOORE, of Camden, S. C., and addresses of welcome were delivered by Dr. J. Somers Buist, President of the Medical Society of South Carolina, and by the Hon. William A. Courtney, Mayor of Charleston.

DR. MOORE then read his annual address, entitled THE COUNTRY PHYSICIAN: SOME OF HIS DIFFICULTIES AND CAPABILITIES.

After thanking the Association in graceful terms for the honor conferred upon him in his election and expressing his high appreciation of the same, he explained that he embraced in the expression "country physician," practitioners in towns and villages as well as those in rural districts. He then alluded to most of the difficulties that beset a physician both in and out of the profession. He said it is difficulties such as these that fetter the zeal and energy of the struggling physician. Is there no remedy for these evils? he asked. Can no relief be afforded the hard-worked and half-paid physician by legislative enactment?

The landlord is secured for his rent, the merchant for his advances, the lawyer for his fees, and the common laborer for his wages. Why, then, should not some protection be guaranteed to the physician?

In this connection he called attention to a hardship which the law imposed on the physician, and which bears especially hard on the country physician. We are not unfrequently summoned ten or fifteen miles to attend a coroner's inquest. The circumstances surrounding the murder or sudden death, as the case may be, are such as to make a careful dissection absolutely essential. We are thus called away from our regular duties at the sacrifice of time and labor, and probably more pleasant and lucrative employment, besides incurring the personal risks of septic poisoning, and for all this, exclusive of mileage, we are allowed the large fee of ten dollars. But the trouble does not terminate here, for of course we are subpoenaed to attend court as expert witnesses, where we may possibly be detained a whole week for our testimony and we receive no higher compensation than ordinary witnesses. It appears to him, then, neither inconsistent with his calling nor with the dignity of the Association to demand a proper pecuniary recognition for such services.

There is another difficulty to which I would briefly allude before leaving this part of my subject. We all know that druggists, and especially those of our country towns, often transcend their province and assume the role of physicians by counter-prescribing. This is not only a usurpation fraught with danger to the lives of their patrons, but is a palpable infringement of the rights of the physician which merits our unqualified condemnation.

DR. A. A. MOORE, of the Committee on

PRELIMINARY EDUCATION

for the study of medicine, presented a report of that Committee, which was adopted after amendment, so as to read, "That this Association recommend to its members the necessity of due caution in regard to the receiving of illiterate students into their offices for the purpose of studying the profession, and that, as far as possible, they shall endeavor to have the preliminary education of such students brought up to the standard of a thorough knowledge of English, a respectable acquaintance with history and literature; arithmetic, embracing rules of fractions; geometry, at least three books of Legendre; elements of physics and chemistry, familiarity with Greek and Latin, including their grammars and translations of sentences, as selected from the Commentaries of Cæsar and the Anabasis of Xenophon."

A further amendment was then offered, "That one of the modern languages could be substituted for one of the ancient languages," and the report was then unanimously adopted as amended.

DR. T. L. OGIER, of Charleston, read an interesting article on

THE TREATMENT OF EPITHELIOMA,

giving the history of three cases which were successfully treated by what is known as Collins's cure for epithelial cancer, modified according to the circumstances of the case. The prescription was the following:

R.—Acid. carbolic. 3ss.
 Acid. sulphuric. dil. 3ij.
 Glycerine 3ss.
 Aqua destil. 3ij.—M.

S.—Ft. lot.

Very finely powdered fresh ergot, 3j.

Directions: With the lotion paint the tumor freely with a camel's-hair pencil, and just before it is dry dust freely with the powdered ergot. This to be repeated night and morning. Every second night apply a bread and milk poultice, to keep the surface of the tumor soft. The modification of this is to make the poultice contain equal quantities of bread and powdered ergot, and paint the tumor once during the day with the fl. extr. ergot.

DR. CHARLES W. KOLLOCK, of Cheraw, reported the successful

REMOVAL OF A FOREIGN BODY FROM THE VITREOUS humor of the eye by means of the electro-magnet, without the loss of sight.

DR. CORNELIUS KOLLOCK reported

TWO CASES OF OVARIOTOMY

with one recovery. In neither operation was carbolized acid used, except the sutures, which were carbolized.

DR. FRANCIS L. PARKER, of Charleston, read a paper on

TRANSPLANTATION OF THE CONJUNCTIVA OF THE RABBIT TO THE HUMAN EYE, IN A CASE OF SYMBLEPHARON ASSOCIATED WITH CONVERGENT SQUINT.

After which he reported

A CASE OF ANOSMIA, ASSOCIATED WITH CONGENITAL BONY STENOSIS OF THE VOMER WITH NEARLY IMPERVIOUS INFERIOR MEATUS OF THE NOSE; OPERATION BY DRILLING, FOLLOWED BY RAPID IMPROVEMENT IN SMELL.

(Both of these papers will appear in full in future issues of THE MEDICAL NEWS.)

DR. MIDDLETON MICHEL, of Charleston, read a paper on

EXENTERATION, A SUBSTITUTE FOR ENUCLEATION OF THE EYE,

illustrated by a case of gunshot injury of the eye, in which he had resorted to this procedure to avert sympathetic ophthalmia. (The paper will appear in full in an early issue of THE NEWS.)

During a temporary business recess occurring the next day, Dr. Michel operated, before the Association, upon another patient, who three weeks previously had sustained an injury of the eye that had developed serious symptoms of sympathesia, thereby practically exhibiting the character of the new method which he had described.

PARACENTESIS.

DR. F. PEYRE PORCHER, of Charleston, reported nine cases (new series) of pleuritic effusion with removal of 709 ounces of fluid; also one of paracentesis in an abscess of the liver. These cases were all seen in the course of four or five months, and were intended to show the unusual frequency of this condition. In the case of the abscess of the liver, twenty-four ounces of pus were withdrawn with recovery.

DR. E. MILLER, of Florence, reported

A CASE OF CÆSAREAN SECTION

in a deformed primipara, who had not sat up or walked since she was six years old and being in her twentieth year, she had spent fourteen years in bed. She weighed about sixty pounds.

DR. A. MEMMINGER, of Charleston, read a paper entitled *Hyperinosis the Cause of Death in a Case of Chronic Parenchymatous Nephritis*.

DR. T. LEGARE, of Charleston, reported the successful treatment of

CHYLURIA

by means of the following tonic:

R.—Tr. ferri chlor. ʒj.
Syrup hypophosphites ʒij.
Aquæ ad. ft. ʒvj.—M.
Sig.—A dessertspoonful in a wineglass of water.

DR. J. F. MACKEY, of Lancaster, reported

A RARE FORM OF DISEASE

which appeared over a portion of that county, and resembled very much an epidemic of dysentery much increased in malignancy and characterized by a tendency to sudden collapse. The straining and tenesmus were not near so great and distressing as in an ordinary case of dysentery. The distinguishing feature of this disease, however, was the powerful impression made upon the nervous system, producing general congestion, but more especially that of the kidneys with a strong tendency to collapse, as shown by a partial and sometimes total suppression of urine, low temperature, pulse feeble and frequent. Quinine and opium proved to be the only drugs which at all controlled it.

The following were then elected

OFFICERS FOR THE ENSUING YEAR:

President.—Dr. O. B. Mayer, Jr., of Newberry.
Vice-Presidents.—Drs. Thomas J. McKie, of Edgefield; H. D. Fraser, of Charleston; T. Munro, of Union.
Recording Secretary.—Dr. W. P. Porcher, of Charleston.

Corresponding Secretary.—Dr. J. L. Dawson, Jr., of Charleston.

Treasurer.—Dr. H. W. DeSaussure, Jr., of Charleston.

MISSISSIPPI STATE MEDICAL ASSOCIATION.

Eighteenth Annual Session, held at Greenville, April 15 and 16, 1885.

(Specially reported for THE MEDICAL NEWS.)

THE Mississippi State Medical Association held its Eighteenth Annual Session in the city of Greenville, April 15 and 16. The Association was called to order by Vice-President Gresham, as the President, Dr. D. L. Phares, was prevented from attending the meeting by illness. Rev. Stephen Archer, of Greenville, delivered the address of welcome, which was replied to by Dr. Hyer. The attendance on the meeting was very small, in fact the smallest ever had. But few reports were received on special medical topics.

DR. PHARES sent on his report on the *Medical Flora of Mississippi*, which was referred, without reading, to the Committee on Contributions.

DR. WIRT JOHNSTON presented a report on *Aspiration*, together with several cases of hepatic abscess and empyema. The relative value of the aspirator and free incision was discussed, and many seemed to favor incision as a possible curative procedure.

DR. ROBBINS, of Vicksburg, reported a case of *Traumatic Tetanus* occurring twenty-four days after operation, with the wound almost completely healed.

Among other valuable contributions offered, were Dr. Brownrigg's on *Fractures*, and exhibition of his apparatus for extension and counter-extension in fracture of the bones of the arm and forearm.

The Association elected for nomination the following for members of the

STATE BOARD OF HEALTH:

First Judicial District.—E. P. Sale, M.D.

Second Judicial District.—John Wright, M.D.

Third Judicial District.—S. V. D. Hill, M.D.

Fourth Judicial District.—J. H. Blanks, M.D.

Sixth Judicial District.—R. T. Edwards, M.D.

All the above were reelected, with the exception of Dr. Edwards, who was elected to fill the unexpired term of Dr. C. A. Rice, resigned.

The Association, deeming it necessary to have a *State Hospital*, appointed a committee, consisting of Drs. Robbins, Stillwell, Sale, and Todd, to prepare a memorial and present it to the Legislature on the subject.

ELECTION OF OFFICERS

for the ensuing year resulted as follows:

President.—J. B. Gresham, M.D., of West Point.

First Vice-President.—I. B. Pease, M.D., of Concordia.

Second Vice-President.—S. R. Dunn, M.D., of Greenville.

Corresponding Secretary.—M. S. Craft, M.D., of Jackson.

Recording Secretary.—W. E. Todd, M.D., of Clinton
Assistant Recording Secretary.—Geo. K. Harrington, M.D., of Jackson.

Treasurer.—John F. Hunter, M.D., of Jackson.

The Association selected Jackson as its next place of meeting.

MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

Eighty-seventh Annual Meeting, held at Baltimore, May 12, 13, and 14, 1885.

(Specially reported for THE MEDICAL NEWS.)

TUESDAY, MAY 12TH.—FIRST DAY.

THE 87th annual meeting of the Medical and Chirurgical Faculty of Maryland was held in the hall of the Historical Society of Maryland, on Tuesday, May 12th, at 12.30 P.M. The PRESIDENT, DR. T. S. LATIMER, of Baltimore, was in the Chair.

After preliminary business the Faculty listened to

THE PRESIDENT'S ADDRESS.

THE PRESIDENT, after a few preliminaries, introduced his subject which was,

THE ORIGIN AND DIFFUSION OF CHOLERA.

He began by stating that this disease is indigenous to Asia and to Asia only. Although it is said that ancient Greek and Roman physicians, as well as Arabian writers, mentioned cholera, an examination into these claims shows that they rest upon an erroneous diagnosis between two similar but distinct diseases. The one, cholera Indica, is communicable and fatal in at least fifty per cent. of the cases, the other, cholera nostra is non-communicable and rarely fatal. In Hindoo writ-

ings we have descriptions of cholera in the 16th and 17th centuries, but they are unreliable because they confuse dysentery, diarrhoea, and colic with it.

The earliest reliable account is that by Generat, in 1768-69, of an epidemic that swept off 60,000 persons in one year. Dr. Latimer referred to other early accounts of cholera, and said that it was almost certain that it had been epidemic in extra-Indian countries before 1817. In this year the disease, which had heretofore been for the most part confined to India, overran the whole peninsula and penetrated almost to the whole habitable globe, numbering its victims by millions. There have been, in all, five pandemics: 1817-1823; 1826-1837; 1845-1853; 1865-1875. The fifth is now in progress. The speaker then proceeded to describe the course of the first two cholera pandemics, going less extensively into the others. The result of a careful investigation of the history of these pandemics shows that each time cholera has left its native home it has occupied more territory, and certainly has not abated its violence. Certain sections have enjoyed notable immunity, as, *e. g.*, Switzerland, several mountainous districts of Scotland, large parts of Greece, and there are examples of smaller localities that have been encircled by severe epidemics of cholera and yet have remained free from the disease, notwithstanding frequent communication with the infected districts.

The fifth and present pandemic commenced in 1883 by an outbreak in Egypt. What this outbreak was has been the cause of much dispute, some claiming that the disease was not cholera, but was only caused by the extremely bad hygienic conditions that prevailed. These unhygienic conditions are allowed on all hands, but, as direct communication can be traced, it seems most natural to believe that this was true Asiatic cholera, especially as the restraints on commerce with infected ports were removed shortly before its appearance.

The question of the contagiousness of cholera is still an unsettled one. The fact that nurses and attendants upon cholera patients are not attacked any more frequently than others, cannot be explained on the theory of contagion. The contrary fact that those who wash the clothes of the sick are very frequently attacked, can hardly be explained on any other theory than that of contagion.

Koch and his followers, who believe that cholera is due to the presence of the comma-bacillus, of course believe also in its contagiousness. But Koch has not yet succeeded in establishing his theory. Similar bacilli have been found in the saliva of healthy persons. Injections of solutions containing dejections of cholera patients into the stomach of dogs have produced no results. Other experiments, in regard to the action of the bacillus on the organism, have yielded negative results. Klein, in India, found a bacillus, exactly similar to Koch's, in drinking water which was being used in large quantities, while the people remained healthy. Koch has an answer to these objections, but yet they throw great doubt upon his theory, which must still be held *sub judice*. It may be that, as Klein thinks, the poison is a chemical one.

Still, even if the comma-bacillus be proven to have no direct influence, there may, nevertheless, be a germ, and the disease may be communicable. It seems very clear that drinking water, whether Pasteur's view be

correct or not, has a very direct effect in the causation of the disease, since improvements in the water supply have been followed by most satisfactory results in the diminution of the disease.

There is no doubt that soil-saturation favors the development of cholera, that is, where the saturation, be it of water or of more directly poisonous fluids, is not so great as to prevent permeation of the air. Lowlands are first attacked, also low parts of the cities. Sections resting upon compact stone are apt to escape, whereas, if the subsoil be near enough to the surface to keep the ground continually damp, it renders the locality peculiarly liable to the disease. Soils unfavorable to the retention of moisture, or if completely submerged, do not predispose to cholera.

A very striking illustration of the immunity enjoyed by localities resting on the solid rock, occurred in a small town within walking distance of Toulon. Although cholera was raging in Toulon, and many refugees fled to the neighboring town, which was in a very unhygienic condition, the disease did not break out there, for it had the solid rock underneath.

There are grounds for fearing that cholera may soon visit our shores and come amongst us in this city. Are there any measures to combat the spread of the disease? Quarantine will be tried, but it is a very inefficient protection. The sanitary condition of the city is the most important thing to be attended to. Much of this can be done by the Board of Health, but not all. To be effective, the citizens themselves must be willing to help the authorities. All cellars should be cleaned and ventilated; dirt in and about houses, and in back yards, should be removed. Streets should be well swept, but not swept till after they have been sprinkled. Koch, indeed, says that moisture should be avoided as favoring the growth of the bacilli; but Pasteur says that when dry the particles are more likely to float in the atmosphere. At all events, before the visit of cholera, when it is most important for these precautions to be taken, Koch's objection does not hold good. All these precautions should be taken, especially in low-lying parts of the city. Spoiled vegetables should not lie about the markets. Hucksters should be required to remove the debris from their stalls themselves, and not leave them to be cleaned up afterward. The practice some of them have of emptying their refuse into the gutters during a heavy rain, which is at all times reprehensible, is, during the prevalence of cholera, or even when it is feared, positively criminal. All privies should be emptied and disinfected.

In case the disease should really come, prompt disinfection of the premises where it has made its appearance is of the utmost importance. There is reason to believe that sulphur fires have a controlling influence, though it has not yet been proved. In regard to personal hygiene, the important things to be observed are, cleanliness, moderation in eating, the avoidance of stale vegetables and fruits, not the avoidance of all fruit, since taken moderately they are beneficial. Let the drinking water be boiled before it is drunk. This last is important.

In regard to leaving the city, we must remember that the attendants on the sick are not specially liable to take the disease; flight is expensive, apt to prove unavailing, and, for the physician, is not very honorable.

On motion it was decided to appoint a committee of three to take into consideration the practical suggestions contained in the President's Address, and to recommend the best course to be pursued in anticipation of the cholera, and report at a future session of the present meeting of the Faculty.

TREASURER'S REPORT.

DR. W. F. A. KEMP reported a more satisfactory condition of the treasury than was the case last year. The membership had been increased during the year by nine.

THE EXECUTIVE COMMITTEE,

DR. P. C. WILLIAMS, Chairman, reported that Prof. H. Newell Martin, of the Johns Hopkins University, had consented to deliver the annual oration this year; also that owing to the pressure of lectures, etc., the Trustees of the University had been unable to grant them the use of Hopkins Hall this year. The Executive Committee had, therefore engaged the Hall of the Maryland Historical Society. They were the more satisfied with this arrangement, as they hoped that the Faculty would be willing to make this Hall their permanent home.

THE LIBRARY COMMITTEE,

DR. I. E. ATKINSON, Chairman, reported that they had had much difficulty from insufficient funds. They called attention to the constitution, which provided that one-half the money received by the Treasurer for dues from members should be paid to the Library Committee. They pointed out that this rule was mandatory, and left no option in the matter with the Treasurer. If a deficit resulted from this, it would have to be met by special assessment. They complained that this amount, which belonged by the constitution to the Committee, had not been paid to them in full, and they gave notice that they would at a suitable time in the meeting offer a resolution to the effect that the Treasurer should be required to pay over to the Library Committee, month by month, one-half of the money he has received during the month for dues.

THE COMMITTEE ON MEMOIRS,

DR. JNO. R. QUINAN, Chairman, reported the death of four of the Fellows during the past year, as follows, viz.:

Dr. Riggins Buckler, born 1834, M.D. 1853, died Aug. 30, 1884.

Dr. Daniel Hartmann, born 1818, M.D. 1839, died Dec. 15, 1884.

Dr. Geo. S. Kinnemon, born 1848, M.D. 1874, died Dec. 12, 1884.

Dr. J. Robt. Ward (President State Board of Health), born 1807, M.D. 1828, died April 29, 1884.

A short sketch of each of these was given, and suitable eulogies.

THE COMMITTEE ON ETHICS.

DR. P. C. WILLIAMS, Chairman, reported that, as they had made a full report to the Faculty at a special meeting concerning certain members who had given their public endorsements to a quack medicine, and as the Faculty had acted upon that report in suspending or reprimanding the delinquents, the Committee had deemed it unnecessary to make any further report, as nothing fresh had been brought to their notice.

WEDNESDAY, MAY 13TH.—SECOND DAY.

THE ANNUAL ORATION

was given by PROF. H. NEWELL MARTIN, of the Johns Hopkins University, who chose for his subject

THE PHYSIOLOGICAL ACTION OF DRUGS.

As the object of all the education of a soldier is to enable him to destroy his enemy, so the object, from first to last, of all medical education is to enable him to destroy his enemy—disease. As the science of modern warfare differs from the ancient, so the science of medicine differs from that of the Greeks and the Egyptians; and, as a consequence upon the advance that has been made, we have the establishment of physiological and pathological laboratories, whose object is to enable the physician to fight disease more successfully.

Pharmacology can hardly be said to have existed till the present century. The meaning of the Greek word from which it is derived contains the idea, not only of the use of drugs, but also of the use of spells, poisoning, witchcraft, and sorcery; so that one who practised this art might be a physician, a sorcerer, or poisoner. Even to-day among the laity this idea has not altogether passed away, as is seen in the lingering belief in the seventh son of a seventh son.

Prof. Martin proceeded to outline the progress of the use of drugs from the time when persons seriously ill were exposed in the streets of Egyptian cities in the hope that some passer-by, having seen some similar case recover, might be able to suggest a remedy. But medicine gradually advanced through a long course of empirical research. This method was, as far as it went, sound. But in the middle ages this was replaced by false and absurd sciences and fanciful ideas concerning drugs. He particularly instanced the doctrine of "signatures," which resulted in giving as medicines for various diseases of the body such plants as possessed some fanciful likeness to the parts affected. Hence, we have the names "liverwort," etc. These and other fancies held their sway over the minds of physicians as long as they practised on mere *à priori* grounds without careful investigation. All this time pharmacology as a science was impossible. Even after the time of Sydenham, it had to wait for chemistry to come to its aid. Bichat, early in the present century, pointed out that all organs were composed of several tissues, of which some might be healthy and others diseased, and seems to have noted that the action of drugs on the various organs needed to be investigated. Magendie, his pupil, made the first pharmacological research.

Prof. Martin went on to describe in detail Magendie's experiments with strychnia (upas). He went through the various experiments by which Magendie arrived at the conclusion that strychnia is carried by the blood to the spinal cord, and that it exerts its influence there. From strychnia he passed on to the consideration of chloral, which the Professor said "we owe entirely to scientific research." It is a substance discovered by Liebig, in 1830, when engaged in a purely chemical investigation. It and chloral hydrate remained for years a chemical curiosity, chiefly useful in the light it threw upon the chemical architecture of ethylic alcohol, etc. It was found that, when heated with alkalis, it broke up into formic acid and chloroform. Liebreich, taking

the fact that the blood is feebly alkaline, thought that it might prove of therapeutic value by slowly giving off chloroform in the blood, thus proving a safe anæsthetic, and productive of sleep. This having been tested on lower animals, it was tried on human subjects with success, although the theory on which it was tried is not correct. This is a drug, then, for which physicians have to thank experimental research.

Amyl nitrite is a good example of how many sciences coöperate in adding to the physician's armament. A chemist was employed to extract from a certain make of wine, in the south of France, an oily bitter substance, known as oil of marc, which interfered with its sale. In the course of his experiments on this he discovered nitrite of amyl. For years it was unknown as a therapeutic agent. But other investigators were preparing the way. Prof. Martin then described the discovery by physiological research of vaso-motor nerves, the localization of their centre in the medulla oblongata, and the explanation that these discoveries gave of flushing and pallor. Guthrie (1859) observed that amyl nitrite, when inhaled, caused flushing of the face, and suggested that it might be useful in asphyxia from drowning and strangling. Benj. Richardson (1865), from physiological study, found that it caused dilatation of the smaller arteries and capillaries. It was afterwards found, in a similar way, that the drug lowered arterial tension. Then pathology came in. Brunton lived with a patient who was a victim to angina pectoris. He found from the sphygmograph that arterial pressure was great in this disease. He remembered Richardson's experiments, and let the patient inhale the drug—result, relief in thirty seconds. Other physiologists have verified this action of the drug. Wood says: "It seems useless to speculate how the nitrite acts, but there is now abundant evidence of its value in relieving almost instantly agony which has resisted all other treatment." This has not been discovered by chance, but by scientific reasoning.

Dr. Martin then spoke of the importance of laboratories for the study of the action of drugs on the living body. There is no such institution used *exclusively* for this purpose in the United States. He gave it as his opinion that pharmacology depends upon experiments on living animals. He thought such observations should be tried on the lower animals first, the Bishop of Oxford to the contrary notwithstanding. Prof. Martin went on to explain that it is a great fallacy to think that the chief thing to be considered in vivisection is pain. It is to save life as well as to relieve pain in man. Men and women subject themselves and their children to pain in order to cure deformity or to enhance beauty, which shows that, in their judgment, physical pain is not the worst thing in the world. We wish to increase our effectiveness as physicians, and is not a practice which offers reasonable hope for this, though a hundred—nay, a thousand—animals be sacrificed, and some of them suffer pain, justifiable and right? When we consider the great activity of chemistry in discovering new compounds every year, of their probable value therapeutically, of the diseases that now baffle us, we can see the importance of not hindering scientific research.

NEW YORK COUNTY MEDICAL ASSOCIATION.

Stated Meeting, April 20, 1885.

THE PRESIDENT, CHARLES A. LEALE, M.D.,
IN THE CHAIR.

On calling the meeting to order, the President stated that since the last meeting the members had received the first volume of the Transactions of the New York State Medical Association, containing more than fifty contributions from those who are daily working in the field of scientific medicine. In referring to the list of membership, we see that before the close of the first annual gathering there were more than five hundred Fellows, representing nearly every county in the State. An incorporated organization developing such vitality during the first year of its existence, demonstrates its necessity, and the great power it has for future usefulness.

The New York County Medical Association is the eldest of the now numerous children of the New York State Medical Association, and as such heartily tenders its congratulations to the parent association on having been able, in so brief a time, to present to each of its Fellows a volume containing so many living thoughts of a living present.

DR. J. LEWIS SMITH then read a paper on

INCONTINENCE OF URINE IN CHILDREN,

in which he stated that the condition is more common in boys than in girls. The enuresis may be both diurnal and nocturnal, but is more frequently nocturnal. At the outset he gave a description of the anatomy of the bladder, dwelling particularly upon the muscular coat with its two layers of unstriated muscular fibres, and their physiological action. He also described the nerves of the bladder, stating that the sympathetic innervation greatly predominated over that derived through the sacral nerves for the spinal cord.

Etiology. Having mentioned that two or more are often present in combination, he proceeded to give eight causes for incontinence, as follows:

1. Too great acidity of the urine, causing undue contraction of the bladder. The acidity is commonly due to uric acid, but in certain instances depends on the presence of lactic and hippuric acids.
2. Increased quantity of urine. Sometimes, when there is no disease present, like diabetes, this is due merely to the too free use of liquids.
3. The presence of a vesical calculus. When there is stone in the bladder, the incontinence is both diurnal and nocturnal.
4. Abnormal contractile power of the muscular coat of the bladder. It was from this increased functional activity, due to too great irritability, that Trousseau was led to classify incontinence of urine in children as a neurosis, and the importance of this cause is shown by the fact that belladonna is useful in so many of the cases of enuresis.
5. Weakness of the muscular fibres constituting the sphincter of the bladder. Incontinence from this cause is rare in those in good health, and is usually seen in the poorly nourished and children suffering from impairment of innervation as the result of disease. It is associated in some instances with incontinence of feces, the loss of power in the sphincter of the anus being no

doubt due to the same cause as that of the sphincter of the bladder. In this connection, he gave the report of a case in which this failure of the sphincters was associated with the presence of spina bifida.

6. Reflex action, through the agency of the nerves supplying other organs in addition to the bladder. There are certain cases of incontinence which depend on structural disease of the spine, the presence of ascarides in the rectum, phimosis, preputial adhesions, etc. In many cases of the latter it is not necessary to perform circumcision, or even to slit up the prepuce, relief being afforded by simply dividing the adhesions, clearing away hardened smegma, and stretching the preputial orifice with a probe. In the out-door department of Bellevue Hospital, large numbers of young children suffering from incontinence of urine are cured in this way every year.

7. Dr. Roberts Bartholow had directed attention to a psychical cause, viz., the child dreaming that it was in a convenient place for urinating, and so yielding to the inclination. That the enuresis is to a considerable extent under the control of the will is shown in cases in which the habit was broken up by the sending of the child among strangers or to boarding-school, where the sense of shame constituted an influence sufficient for the purpose. Numerous instances are on record in which a flogging has permanently broken up the habit.

8. Malformation of the bladder or its appendages. These are sometimes of such a nature as to render the incontinence incurable. Thus, Dr. Thomas W. Madden had reported the case of a young lady who suffered from a constant dribbling of urine, both by day and night, in which he found, on examination, that there was undoubtedly a malformation of the right ureter, which discharged the urine from the kidney on that side directly into the vulva, instead of into the bladder.

Prognosis. This depends naturally on the cause or causes giving rise to the enuresis, but in the majority of instances it can be cured by the adoption of measures appropriate to each individual case. Where the affection is not controlled before, the influence of puberty or of marriage and pregnancy in checking it seems to be well founded, but of course treatment is not to be delayed with any such idea in view.

Treatment. The all-important point is to discover the cause, when the management of the case can be conducted in an intelligent and effective manner. If the trouble seems to depend on the character of the urine, this is to be rendered as bland and unirritating as possible, and Dr. Smith said that since he had recognized the acid character of the urine as a frequent cause of incontinence, he has been able to treat very satisfactorily quite a large class of cases which had formerly proved troublesome. It is his practice to endeavor to render the urine as bland as tepid water. If there is acidity, he gives from three to five drops of liquor potassæ, well diluted, three, four, five, or six times a day, until the urine becomes neutral in reaction, and then continues the alkali in just sufficient quantities to maintain the neutral condition.

When there is increased functional activity the great reliance is to be placed in belladonna, which has the direct effect of diminishing the muscular irritability. The tincture is the preparation commonly used in this country, and of this five drops may be given every night

and morning, the dose being increased by one drop each day until the desired effect is obtained or the physiological action of the drug has become apparent. When belladonna is found efficient, it is to be kept up for some weeks in full doses, and the quantity then gradually diminished. This agent has been highly lauded by Trousseau, who used it very freely. Dr. Smith related a case in his own practice in which a girl eleven years old, who suffered from both diurnal and nocturnal enuresis, and who had previously taken belladonna and other remedies, was cured. The urine was highly acid, and the treatment which he prescribed was five drops of liquor potassæ three times a day (or more if this was necessary to keep the urine neutral in reaction), and tincture of belladonna in nine drop doses, the dose gradually to be increased to fourteen or fifteen drops.

If the enuresis is due simply to the large quantity of urine secreted, the liquid food is to be restricted, especially towards evening; and, if diabetes is present, of course the treatment appropriate to that disease is to be adopted. In diabetes insipidus, ergot is found to be of great service. Suspicion of the presence of a stone in the bladder should be excited by painful micturition, increased quantity of mucus in the urine, and the sudden stoppage of the full stream. The use of the sound will render the diagnosis positive, and the stone can then readily be crushed. In many cases of incontinence, it is important to make a careful examination of the parts contiguous to the bladder, such as the rectum and the genital organs, for the existence of ascarides, phimosis, preputial adhesions, hardened smegma, etc.

If the enuresis is due to paresis of the sphincter, a treatment very different from that by belladonna is required, and here ergot, either alone or combined with nux vomica, or its active principle strychnia, is found very useful in restoring the impaired innervation and stimulating muscular contractility. Two years ago Dr. George B. Fowler, of New York, reported two very interesting cases, in which there was fecal incontinence also, treated with ergot in combination with strychnia. In one there was a relapse, which was successfully treated with ergot alone, in the form of the extract, administered in five grain doses by the rectum. Here there was a markedly relaxed condition of the sphincter ani, indicating also relaxation of the sphincter vesicæ.

A considerable number of remedies which had been formerly employed to a large extent for incontinence of urine are now seldom used; but some of them are still deserving of confidence in certain special cases. Among them is strychnia. In children under four years of age, there was some danger in giving this agent, and it is better to employ nux vomica under the circumstances; but above that age it is perfectly safe to administer it. Tincture of cantharides, although as a rule an unpleasant remedy, can sometimes be employed with advantage, if given in small doses. Cubebs and vegetable tonics and astringents are also sometimes called for. Dr. Smith then related a case reported by Eustace Smith, in which he successfully employed drachm doses of tincture of belladonna in combination with bromide of potassium and infusion of digitalis. It is to be remembered, however, that the English tincture of belladonna has only half the strength of the American preparation.

Local treatment is often attended with a satisfactory degree of success, and the best agent for the purpose is nitrate of silver, applied for the cauterization of the neck of the bladder. Having referred to the use of baths and douches, Dr. Smith closed by speaking of the suggestion of Trousseau, that the patient should be required to urinate as frequently as possible during the daytime.

DR. WM. DETMOLD expressed the opinion that in the majority of instances nocturnal enuresis is simply a vicious habit. He thought it advisable to avoid the expression, incontinence of urine, in this connection. The condition is one of enuresis, and not properly incontinence. The habit, however, is an almost irresistible one, and the only remedy which he had found at all reliable for it is to have a nurse sit by the bedside and take the child up every hour or half hour, compelling it to sit upon the pot until it had evacuated the bladder. When the habit is once broken, the cure is generally complete. Trousseau was right, he thought, designating the condition as a neurosis, and if not cured before puberty, it is very apt to be so at that time. There are some instances, however, in which the difficulty is not overcome until marriage. The enuresis is accompanied by a certain sense of voluptuousness, and he had frequently observed the condition in young soldiers, and in unmarried female adults.

There is only true incontinence when the urine dribbles constantly, both by day and night, and this is observed in patients where there was some organic defect, as in the case of Dr. Madden's reported by Dr. Smith, in which the right ureter discharged into the vulva. Ordinary enuresis, therefore, he looked upon as a neurosis or a vicious habit. Whatever produces local irritation tends to give rise to the habit. The irritation of the glans penis, however, might be a result, and not the cause, of the habit, this being excited by the contact of the wet bedclothes. Where medicine has an effect, he is inclined to believe it is simply a moral effect, produced by the fear of the doctor or the nauseousness of the dose. The more unpleasant the remedy, therefore, the more efficacious it is likely to be.

DR. J. W. S. GOULEY said that he thought Dr. Smith's anatomy and physiology needed a little revision. There was no sphincter vesicæ in the same sense anatomically as physiologically; the so-called sphincter of the bladder not being at all comparable to that of the rectum. It had been demonstrated, beyond question, forty years ago that there is no such thing as an anatomical sphincter to the bladder; though there is a distinct physiological one. It is not the circular muscular fibres, but the longitudinal and oblique ones which exert this sphincter-like action. In regard to the compressores urethræ having any power to control the stream of urine after it had emerged from the bladder, as mentioned by Dr. Smith, this is an entire mistake; the physiological sphincter alone having any such control. He agreed fully with Dr. Detmold, that the word incontinence when applied to children who wet their beds is incorrect, nocturnal enuresis being the proper term for this condition. The urine is passed, not because the bladder cannot contain it, but because it has to hold too much. There is rather retention, with an overflow of urine.

Dr. Smith had attributed to Dr. Bartholow something

which did not belong to him, as it was Jean Louis Petit, who lived more than a hundred and fifty years ago, who first called attention to the cause of nocturnal enuresis mentioned in connection with Dr. Bartholow's name. Petit stated there were three classes of children who wet the bed: *First*, those who are too lazy to rise and urinate; *second*, those who sleep so soundly that the sensation of desire which precedes the act of urination is not sufficiently strong to awaken them; and, *third*, those who dreamed that they were urinating. Trousseau had added a fourth class, viz., those who through fear would not arise to urinate; but this class of Trousseau's, as well as the first class mentioned by Petit, he thought ought to be excluded, so that there would remain simply the second and third classes just stated.

It will be found that there is usually a considerable accumulation of urine in the bladder, and the most frequent causes of the enuresis are lithuria and polyuria; the latter being often met with in nervous children. Children after they become two or three years old do not wet their clothing through the day, but only at night. In some instances such children retain the habit until they are grown, and he had seen men twenty-five, thirty, and forty years of age, who were still subject to it. No amount of whipping will cure a child of wetting the bed; on the contrary, corporal punishment does harm, and only makes the condition worse. Lithuria is much more common in young subjects than is generally supposed. When this is present, there is not an accumulation of urine, but a constant enuresis, both diurnal as well as nocturnal. Dr. Gouley here related a case in a boy four years of age, who was an epileptic. In all such cases, he said, the trouble will continue indefinitely unless a decided course of treatment is adopted.

He did not agree, therefore, with Dr. Detmold in the idea that treatment is of no service. On the contrary, he believed that there should be both local and general treatment. He thought, however, that it is a mistake to attempt to make the urine as "bland as tepid water," as Dr. Smith spoke of doing. This would only increase the enuresis, as very bland urine, like pure water itself, is known to be irritating to the bladder. Dr. Smith had spoken approvingly of lithotripsy in cases of stone; but in children, under the age of ten, this operation had been tried and found wanting, lithotomy being in reality much more safe. As to cauterization, he trusted that Dr. Smith did not mean that this should be done with Lallemand's *porte-caustique*, as he regarded this as excessively dangerous. But in connection with the internal administration of iron, more particularly the old-fashioned tincture of muriate of iron, he had often afforded great relief by the introduction of the sound or catheter every two or three days. As a rule, the steel sound, if skilfully used, was preferable to the gum catheter. In both boys and girls (although the number of the latter that he had seen suffering from enuresis was quite small), he had observed excellent results from this practice, and he did not think Dr. Smith had mentioned the simple passing of the sound. He believed that Trousseau, Vulpian, and Nélaton, had all employed it. Dr. Gouley also spoke of the influence of heredity in the etiology of nocturnal enuresis.

DR. P. BRYNBERG PORTER called attention to the much greater tolerance of belladonna, proportionally, in chil-

dren than in adults. In the *British Medical Journal* of February 7, 1885, Dr. E. Paget Thurston had reported a case of nocturnal enuresis in a girl seven years old. At first she was given ten minims of tincture of belladonna three times a day; but this had no appreciable effect upon the condition. He then ordered the belladonna in drachm doses, one dose to be taken in the afternoon, and another four hours later, just before going to bed. The second night there was no enuresis; after which only one dose a day was taken, at bedtime, and this was continued for four more nights. The cure was then complete and permanent. He had himself also often noticed, in giving belladonna in whooping-cough and other affections, what large doses children would bear without showing the constitutional effects of the drug. He would like to ask Dr. Smith whether he had had any experience with chloral hydrate in nocturnal enuresis. During the last four years this agent had been highly lauded in this condition, and he had personally tried it in a number of cases in which the affection did not seem to be dependent on any removable local cause. While, however, in certain instances it had seemed to afford partial relief, as a rule, he had been disappointed in regard to its action.

DR. JANEWAY said that from his own experience he could undoubtedly confirm the truth of Dr. Porter's assertion in regard to the very marked tolerance of belladonna in children. He was frequently in the habit of using atropia, rather than belladonna itself, for the sake of accuracy, and sometimes gave no less than one-seventieth of a grain three times a day, while in other cases he gave as much as one-fiftieth of a grain. It was well to remember that we ought not to depend on any set of rules in regulating the dose, but in each particular case to increase the quantity gradually until the desired effect was produced. Trousseau used to give belladonna in exceedingly large doses for epilepsy, as he did strychnia for chorea. Where the enuresis seemed to be dependent on the spinal cord, there being too easy reflex, he had found a combination of iodide of iron, ergot, and belladonna of more service than anything else which he had tried.

DR. C. S. WARD said he regretted that he had not heard a considerable portion of the paper, but it seemed to him that the children who suffered from enuresis could be divided into two great classes. The first consists of those who are poorly nourished, surrounded by bad hygienic conditions, and apt to be scrofulous; and in this class of cases he had found that syrup of the iodide of iron and cod-liver oil, in addition to good food and fresh air, generally prove of much service; so that he could not agree with Dr. Detmold that treatment does no good. The other class of children consists of those who are healthy, well-fed, and active, and in this class belladonna, in connection with chloral, is often the most useful. It is the best plan, however, to attend first to any local trouble that may give rise to the enuresis, and sometimes the use of moral influences is sufficient to break up the habit. In this connection he related the case of a boy with phimosis, who was accustomed to wet the bed at night, in whom the threat to perform circumcision had the effect of working a cure.

DR. F. V. WHITE said that, like Dr. Gouley, he believed that heredity had some effect in causing enuresis.

DR. JANEWAY said that he had neglected to mention that some of the cases were in reality cases of latent epilepsy, in which urination took place during nocturnal attacks.

DR. T. R. VARICK, of Jersey City, remarked that it is very evident that the condition does not depend on any one cause, and it is necessary to investigate every individual case for itself. Many of the cases seem to be due to what used to be called "contiguous sympathy." In one instance, in a child of two years, with a very narrow preputial orifice, he had cured the enuresis by performing circumcision, and he had seen another case, in a boy ten years of age, in which the trouble was dependent on a preputial calculus as large as a bean. Ascarides in the rectum are a not infrequent cause, and he is in the habit of treating this condition by a formula which he learned many years ago from his old preceptor, Dr. John H. Whittaker. Two drachms of aloes are rubbed up with a mint of milk, and given in divided doses by enemata. There is another cure of nocturnal enuresis which is a sort of "old woman's idea," but which he thought may, after all, have some effect, and that is, slapping on the back. It seemed probable that this excites a certain amount of irritability in the trigonum vesicae, and the ordinary remedy for it among the common people is to fasten a spool at the small of the back by means of a string passing around the body. As to medicinal measures, he had tried about everything that had been mentioned this evening. When there is a strumous diathesis, in addition to iron, he is in the habit of employing tincture of cantharides, pushed until a slight degree of strangury is produced.

DR. SMITH, in closing the discussion, said that, in his account of the anatomy and physiology of the bladder, he had quoted the views of many of the highest authorities, and for the statement in regard to the action of the compressor urethra, Belfield is responsible. In regard to the rendering of the urine bland and neutral in reaction, the good results which he had obtained since he had adopted this practice were sufficient, he thought, to justify him in continuing its use. He fully agreed with the gentleman who had spoken in reference to the greater tolerance of belladonna in children; as was also the case with arsenic. Fowler's solution can generally be given in as large doses to young children as to adults. In regard to chloral, he said that he had not tried it in this connection; but it seemed to him that, if it were given in nocturnal enuresis, it would only render the trouble more aggravated by procuring more profound sleep. He agreed with Dr. Varick, that it was very important that a careful study of the probable cause should be made in every case presented for treatment, and on this point he said he could not speak too strongly. In paresis of the sphincter vesicae, he spoke favorably of the action of large doses of syrup of the iodide of iron.

DR. JANEWAY presented these interesting pathological specimens. The first was one of

DILATATION AND RETENTION CYST OF THE VERMIFORM APPENDIX.

The dilatation of the appendix vermiformis, which was due to occlusion of its orifice, did not extend throughout its entire length, the distal portion of appendix being atrophied. The distended portion was

about three-quarters of an inch in diameter, and it no doubt contained mucus with white flakes of cast-off epithelium floating in it, though it had not as yet been opened. This was the third case of the kind which had come under Dr. Janeway's observation. In the first case which he had seen, the cyst of the vermiform appendix was as large as a foetal head at term, constituting a tumor which would have given rise to considerable difficulty in the way of diagnosis during life. In the second case the cyst was about six inches long and twice as large in diameter as the present one. From this same patient, who died of cerebellar apoplexy, Dr. Janeway also exhibited the uterus, which showed *Cystic Degeneration of the Endometrium* from atresia of the cervical canal.

Finally he exhibited a specimen of

COLLOID CANCER INVOLVING NEARLY THE ENTIRE STOMACH,

from the pylorus to the cardiac orifice, and affecting all four of the coats of the organ. It had been two and a half years since the first symptom manifested itself, and the patient was a lady of 50, whose father had also died of cancer of the stomach. Pain had been quite a constant feature of the case, and Dr. Janeway had washed out the stomach a number of times with good effect. A portion of the omentum was found to be also affected with colloid cancer.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, May 7, 1885.

THE PRESIDENT, A. JACOBI, M.D., IN THE CHAIR.

DR. E. DARWIN HUDSON read a paper on

THE PHYSICAL EXAMINATION OF WEAK CHESTS AND DIFFERENTIAL DIAGRAMS OF THE SEVERAL FORMS OF EARLY PHTHISIS.

While the profession, he said, had come to regard physical diagnosis in the hands of experts as affording exact knowledge of the conditions of the intrathoracic organs, the interpretation of physical signs can never be dissociated from some theory of the nature of the existing disease, a conception of its pathogenesis and a knowledge of its gross and minute pathology, as well as the pathological processes which determine its consecutive steps or stages, and its periods of transition from one to another form. The views of Bayle and Louis as to the specific nature of all phthisis and its transmission solely by heredity, had not been questioned for fifty years, but the last twenty years have witnessed almost a complete revolution of opinion as to the prominence or causative relation of miliary tubercle in phthisis, and a majority of all investigators and of the profession have come to acknowledge the three forms of phthisis, the catarrhal, the fibroid, and tubercular. In very many cases the disease exists in a mixed form. Our physical exploration is incomplete if we discover only the presence of cavities and softening, or the evidences of local consolidation, and a thorough diagnosis should include, *in extenso*, an exact knowledge of the condition of each portion of the respiratory apparatus, including the air-passages, vesicles, interstitial tissue, and pleura.

The views presented related to the methods of ex-

amination most useful in studying weak chests with tendencies to phthisis, in detecting the times of transition from danger to disease, and in differentiating the early forms of phthisis. While recognizing the correctness of the views of Simon, of London, and of Niemeyer and Rindfleisch, observation has also made Dr. Hudson a firm believer in the agency of inflammation as the chief factor in developing pulmonary phthisis, whether in those predisposed by heredity or in those free from such predisposition. He then proceeded to review the essential evidences of the three definite types. Having given an epitomized statement of the main physical signs of early phthisis, as generally held, under two heads (in speaking upon the second of which, he said, that an area of notable dulness or flatness on percussion, and of different conduction of sounds, pointed to fibroid phthisis), he expressed the opinion that many careful students of chest acoustics have come to a recognition of the differentiation of the forms of fibroid consolidation, whether starting from the bronchi, as centric and diffuse, or again, distinctly of pleural origin, and pointed out the signs by which they are enabled to do this.

The first point which he said he desired to discuss with reference to efficient and correct chest exploration was the importance of examining all parts of the chest, from apex to base of lungs—front, side, and back. Two areas, almost wholly passed over by most examiners, often afford most valuable information, viz., the high axillary region and the interscapular spaces. In cases of irregular pleuro-pneumonia, and in certain low and indefinite forms of pneumonia, the initial area of pneumonic consolidation, as evidenced by bronchial breathing, has been found only in the axilla. Dr. Hudson dwelt for some time on the importance of the interscapular exploration. It is here that we have the larger bronchial trunks and the hilus of each lung, close to the posterior wall of the thorax, but in order that this area may be examined with advantage it is necessary that the arms should be crossed in front, each upward at an angle of 45°, and the hand on either side made to grasp the convexity of the shoulder, thus increasing the space more than twofold by rotating and drawing outward the scapulae, while at the same time the ordinarily thick and flaccid muscles are rendered tense and thin.

In regard to *inspection*, he said that he was convinced that in a large proportion of chest cases, and in a large number of phthisical ones, an approximate diagnosis can be made by inspection alone; the second point of the paper being the diagnostic importance of this method of exploration, and the desirability of extending it, in detail, to all the structures of the thoracic wall. In this connection he called attention to the direction of the clavicle. When the latter is deflected upward and backward at an angle of 30, 35, or 45 degrees, the chest development has manifestly been most defective during a long term of years, and the presumption is in favor of the existence of lungs, undeveloped at their apices, which have never fully occupied the supraclavicular and clavicular areas. With reference to the relation which slight lateral curvatures of the spine have to the condition of the respiratory organs, he said that an inquiry into the history of a considerable number of cases of lateral curvature will elicit the fact that its appearance has been subsequent to the occurrence of a pronounced

attack of pleuritis or pleuro-pneumonia, or a period of long-continued unilateral thoracic pain associated with cough. It is further found, in many of these cases, that the deflection is toward the side of the chest possessing most respiratory expansion, and that the concavity of the primary curve is toward the side presenting slight or notable diminution of respirator motion; while further exploration, by means of percussion and auscultation, establishes the fact that the curved section of the spine lies within a zone of the chest, affording evidences of thickened pleura, fibroid phthisis, or peribronchial consolidation. The third consideration, which he presented under inspection as pertaining to early phthisis, was the importance of closely observing and interpreting, with their full significance, the changes in the individual intercostal spaces, and also in the supraclavicular space, suprasternal notch, and epigastrium. The special significance of the information thus elicited was in regard to fibroid areas and bronchial distortions, which could not be dissociated from the study of phthisis, since they form a part of it, determining, as they do, the recurring hyperæmia and catarrhal processes which terminate in inflammatory infiltration and ultimate caseation.

Before dismissing the subject of chest inspection, Dr. Hudson stated his views as to the causative relation of the non-development of the chest-wall and its movements to phthisis. He believes that the disease attacks the apices preferably, because, 1st, the apices are so frequently enfeebled by contraction of the upper part of the bony thorax—whether by want of muscular activity and development, or by rounded shoulders, through carelessness and indolence, or through confining work at desk or trade. 2d. That the apex region in this enfeebled condition is soonest reached and most easily invaded by the frequent recurring catarrhal inflammations, descending from the larynx and trachea. 3d. Because the apices, when invaded by hyperæmia or catarrhal processes, are unfavorably affected by the energetic forces of cough. Dr. Hudson did not dwell on *mensuration or palpation*; though, in regard to the latter, he said the method was particularly valuable as relates to the subject of fremitus, and fremitus was especially instructive for negative diagnosis, often indicating the normal chest by a characteristic vibration communicated to the hands which could not be misinterpreted.

In speaking of percussion, he said that the exclusively pulmonary origin of percussion sound was readily disproved; this being most easily accomplished by referring to the percussion note of emphysema, when the overlying bony thorax is in a state of inspiratory fixation, and so tense or rigid that it does not vibrate; so that the contact of the percussing finger-tips elicits a sound relatively high in pitch and devoid of vibration or duration. When the chest-wall is poorly expanded, or when fibroid phthisis or bronchial rigidity have transferred respiratory action to the diaphragm, the motion of the ribs lessens, and the disused ribs become more or less fixed. Under these conditions, percussion of the entire chest frequently elicits only an unsatisfactory and negative sound, devoid of diagnostic features; but, on the other hand, in many cases thickening of the pleura may cause such absolute percussion-flatness as to warrant the inference of a solidified, phthisical lung. The conclusion is, therefore, that in contracted

chests, and in the mixed forms of early phthisis, percussion leads to no positive diagnosis until supplemented by auscultation.

Dr. Hudson then dealt for some time on the significance of the special cutaneous reflex often found in phthisis, first described by Stokes in 1830, and designated by Lawson Tait, in 1871, as *myoidema*, or muscle tremor. The result of his personal observations is (1) that it is usually present in established phthisis, when the long-standing and progressive intrathoracic disease has wasted the body; (2) that it frequently exists in incipient phthisis; and (3) that it is exceptionally present in any other disease, and its presence in such a case justifies a suspicion of phthisis.

In treating, finally, of *auscultation*, he said that the absence or modification of the vesicular murmur has always, and properly, been regarded as a first warning of phthisis; but the presence or absence, fullness of development or enfeeblement of the vesicular murmur is not of so great value in differentiating the three forms of phthisis, and especially the relative properties of each in mixed phthisis. The crippling lesions, in many cases, have so contracted the chest, diminished its expansion, and lessened the velocity and force of the incoming inspiratory currents, that but little respiratory sound is developed to be conducted. Under such circumstances, the phonated voice supplies us with a sound produced quite independent of chest rigidity, diminished expansion, and enfeebled air-currents. But the vibration of the bronchi, the lung parenchyma, and the chest wall, by the full voice often gives no indication of the presence of the lesser lesions of early phthisis; and it is necessary to employ the whisper instead. For a long time he has come to regard the study and application of the conducted whisper as of equal or greater value than the study of changed vesicular murmur and conducted voice, and of far wider application in determining and differentiating the early steps of the three definite forms, and the many mixed cases of phthisis. Thus, at the apex the low-pitched whisper, changed by transmission through the pulmonary media to a high-pitched sound, is diagnostic of incipient infiltration; but the non-conduction of such a low-pitched whisper—silence only, or the distant transmission of a high-pitched whisper—when associated with transmission of the voice unchanged in quality and pitch, point to peribronchial thickening or centric fibroid of limited extent; while the non-conduction of both the low- and high-pitched whispers, and a distant full conduction of the voice, point to a fibroid nearer the surface, or progressing inwards from a thickened pleura. When the smaller tube of the stethoscope is used in connection with the high-pitched whisper, close comparison of adjacent limited areas can be made to great advantage, and the whisper tests are especially of value in distinguishing a healthy lung from one but slightly diseased. The conclusion of the paper was devoted to the subject of hæmoptysis, and to the interpretation of local areas of crepitus.

DR. ALFRED L. LOOMIS said that while he might not agree with the author in every particular, in the main he could heartily endorse all the positions taken. In speaking of inspection, he stated that in 1200 or 1500 chests which he had examined, but 10 per cent. were perfectly symmetrical; but, at the same time, he thought

that by a careful inspection of the whole chest certain information could be obtained which could not be derived from any other source. For a long time after he commenced the study of diseases of the chest, he had regarded, as he had been taught, the infraclavicular region as of special value for inspection; but later he had come to understand that the scapular spaces are of much more importance in this connection, and many and many a time he has found here the early signs of phthisis which could not be detected elsewhere. The axillary spaces are also invaluable to the diagnostician. He spoke also of the various other methods of physical exploration, and said that he would be inclined to lay more stress on the value of percussion than Dr. Hudson had done. Percussion, however, is to be rightly practised, and a single light, though firm tap, will often give more knowledge of the exact amount of infiltration present than can be gained by auscultation, especially in the scapular space. Like Dr. Hudson, he believes that the whispered voice is of far more importance than the spoken. The vesicular inspiratory murmur he also thought of significance; and there are three modifications of it which may throw light on cases of early phthisis, viz., softness, harshness, and interruption. If the murmur is full as well as harsh, it indicates pleuritic changes, probably tubercular in character. By the peculiar harshness observed in the vesicular murmur, he has detected the presence of acute phthisis in many cases, before the easily recognized signs of the disease had appeared.

DR. PAGE fully concurred with Dr. Hudson as to the importance of the diagnostic value of myoidema, and he said that he has now a case under observation, the future course of which he will watch with great interest. This is a lad, fifteen years old, in whom this sign is well-marked, though there is as yet no positive sign of phthisis. He has, however, a hacking cough, and both his temperature and pulse constantly remain considerably higher than normal.

DR. E. G. JANEWAY said in reference to myoidema, that he had studied the matter sufficiently to be convinced of the unreliability of the sign from a diagnostic point of view. There are various muscles all over the body which when tapped will exhibit this phenomena in emaciated patients, and it is especially well marked over the biceps and deltoid. It is not often observed in other diseases than phthisis, because in them the physician is not likely to tap the chest. He believes that it is purely muscular, and that it can be developed in many other localities than the chest, and in many other affections besides phthisis. As to the ordinary physical signs in the early stages of the disease, the most that we can make out by them are condensation, thickening, consolidation, and local bronchitis. The special significance of these conditions it is not always easy to determine, and the chances of error have always to be taken into consideration. While all the signs have their value—palpation perhaps the least of any—they are all liable to mislead at times. There are, however, some others of importance to which allusion has not been made. In cases of doubt it is sometimes very useful to employ percussion during inspiration, during expiration, and in the interval. He is inclined to lay more stress on irritation of the bronchi than Dr. Hudson had done. Râles in the

smaller bronchi, limited to supra- and infraclavicular spaces, are of great significance. When there is evidence of consolidation, it will not do to trust to one examination, since not infrequently pneumonias occur at the apex of the lung. Such pneumonias run a characteristic course, and are apt to leave untouched the anterior portion, involving the posterior and middle part of the upper lobe. At the present time he said he is not willing to make a positive diagnosis without resorting to the microscope. The character and number of bacilli present in any given case are of great importance in establishing the kind of phthisis from which the patient is suffering. Such microscopic examinations should always be conducted with great deliberation and care, and by the best methods, as there are a number of sources of error which are liable to mislead. Dr. Janeway also spoke of the great importance of careful inquiry into the past history of the patient. The signs of early phthisis may be present, and yet a thorough investigation of the case show that they are simply evidences of a bygone disease which had existed several years before in the lungs.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Stated Meeting, April 23, 1885.

THE PRESIDENT, E. O. SHAKESPEARE, M.D.,
IN THE CHAIR.

NOTES ON THE MORBID ANATOMY OF PNEUMONIA.

DR. OSLER read a paper summarizing his experience while pathologist at the Montreal General Hospital. Of 105 autopsies in cases of lobar pneumonia of which notes were available, five were discarded for various reasons. The mortality at the hospital is high on account of the large percentage of grave cases which are admitted; very many in persons debilitated and dissipated.

Of the hundred cases seventy were males and thirty females. Of ninety-four instances in which the age was given, there were eleven case under twenty years; twelve between twenty and thirty; eighteen between thirty and forty; twenty-one between forty and fifty; twelve between fifty and sixty years; and twenty cases over sixty. In fifty-one cases the right lung was affected; in thirty-two the left; in seventeen both. Other details were given of the various lobes affected. The heaviest lung weighed was $72\frac{1}{2}$ oz., and in eight instances the affected organ weighed over $64\frac{1}{2}$ oz. In about fifty per cent. of the cases there was red hepatization; in thirty per cent. mixed red and gray; and in about twenty per cent. gray hepatization. The condition of the pleural air passages, bronchial glands, and unaffected portions of the lung tissue, was described. Among the terminations there were four instances of abscess formation; three cases of gangrene; and one in which there was a process of fibroid induration beginning in the lung. This case was a man aged 55, admitted with pneumonia of the right lung five days after the initial chill. Resolution did not occur, and he died in the fifth week. *Post-mortem:* The right lung was found solid, grayish in color, and in many areas the tissue had a smooth, homogeneous, translucent aspect, and in these a fibroid change was going on; the alveolar walls were thickened, and the fibrinous

plugs in the air-cells seemed undergoing transformation into connective tissue (a slide was shown illustrating this). There were no caseous portions and no tubercles.

As to the other organs, the frequency with which large, firm clots were found in the heart was specially dwelt upon. In only 35 instances was the spleen much enlarged. In 1 it weighed $21\frac{1}{2}$ oz. In 25 per cent. there were marked fibroid changes in the kidneys. Of the complications, there were 5 cases of pericarditis and 16 cases of endocarditis. In 8 instances the meninges of the brain were inflamed, in 5 of them associated with ulcerative endocarditis. In 5 instances there was acute croupous or membranous colitis, and in 1 instance croupous gastritis.

DR. TYSON, in the discussion of Prof. Osler's paper, said that he had been rather incredulous of the termination of croupous pneumonia in fibroid induration, but the specimen exhibited by Dr. Osler demonstrates conclusively that such a condition exists. The facts presented in the paper are such as are not generally collated. Collective reports of autopsies in cases of particular forms of disease are of great value in the study of pathology.

DR. FORMAD asked Dr. Osler why his was not a case of acute phthisis. Croupous pneumonia is a very common accident in acute phthisis. It is croupous pneumonia which causes death, which is well shown by recent investigations of Mercur, of the University of Pennsylvania. Dr. Formad did not believe that croupous pneumonia can last five weeks.

DR. SHAKESPEARE said that the remarks of Dr. Osler about the frequent existence of very firm clots in the right heart, extending into the ventricles, can be corroborated by any one who makes autopsies of cases of pneumonia at hospitals. He had seen them in cases of phthisis quite as extensive and firm, reaching into the vessel going to the affected part of the lung. It is interesting to note the systemic involvement of these cases of croupous pneumonia, and the affection of internal organs as well as lungs in the process which has been regarded as a local disease. We have to do with a general wide-reaching affection rather than local inflammation.

The opinion was advanced by Dr. Osler that the exudation in the air-cells organized, that the process in the organization of croupous exudate is similar to that in the clot in arteries after ligation, and that comparison was the point which Dr. Shakespeare wanted to bring out.

DR. SHAKESPEARE said that he did not believe that a blood-clot in a vessel ever organizes, and his opinion is based on facts detailed in an investigation, which he has published, on the healing of arteries after ligation. The vessel healed not by the agency of the white cells caught in the meshes of the reticulum, but by proliferation of the endothelium of the tunica interna and sub-jacent connective tissue cells. He thought there is reason to believe that there is in this process in the lungs an analogue of the process after ligation.

We have to do with an outgrowth of the interalveolar walls. The ground which Dr. Shakespeare takes is purely that of analogy to the process in a blood-clot in a ligatured artery.

DR. OSLER, in closing the discussion, said that it is well-known that croupous pneumonia may persist five

or six weeks, or even longer, before resolution takes place. It is difficult for anyone, who has not had the experience, to realize the anxiety which such a case may cause. He had reported two such cases of delayed resolution, one in the fourth week and one in the eighth, both with perfect recovery. He is quite aware of the difficulty in distinguishing certain cases of acute phthisis from pneumonia, and had seen a case with Dr. Ross, in which the diagnosis was for some time in doubt, but in the case in question the person had been under observation from the onset, and the symptoms were those of ordinary pneumonia.

Post-mortem, there were no caseous masses, no miliary tubercles, only the condition already described. The termination in fibroid induration, though rare, is perfectly well recognized. In Cornil and Ranvier's *Manual*, as well as in Green's *Pathology*, is a figure which might have been taken from the slide under the microscope.

NEW YORK SURGICAL SOCIETY.

Stated Meeting, April 28, 1885.

THE PRESIDENT, ROBERT F. WEIR, M.D.,
IN THE CHAIR.

COMPLETE PARALYSIS OF THE RIGHT TRIGEMINAL NERVE.

DR. T. M. MARKOE, presented a man, about fifty-five years of age, whose case was interesting principally from an anatomical and physiological point of view. The patient denied positively any syphilitic antecedents, and there was nothing at present calculated to excite suspicion except some superficial ulcers on the lower part of the leg. About eight years ago he began to have pains on the right side of the head, which, in the course of two years, took on a severe neuralgic character, the entire right side of the face being affected. The neuralgic character of the pains subsided gradually, and gave place to a feeling of numbness and insensibility on that side of the face. There is now complete anæsthesia in the region of distribution of the right trigeminal nerve. The sensation in the tongue had been carefully tested by application of chloroform and nux vomica, and complete insensibility found to exist upon the right side, while sensibility on the left side appeared normal. The right eye is also insensitive to the coarsest touch. The man can rub his finger over the cornea without feeling it. In addition to paralysis of sensation, there is also paralysis of motion in the muscles supplied by the trigeminal, the temporal and the masseter muscles being very markedly atrophied. Mastication is exclusively performed by the muscles of the left side, nutrition seems to be perfectly maintained in all the paralyzed parts, but about two years ago a little pimple formed on the margin of the right alai nasi, which ulcerated slightly and then disappeared. Following this, however, there has been a gradual disappearance of tissue about the ala, until now it is almost entirely absorbed, leaving a large and very deforming opening into the side of the nostril.

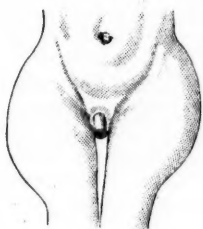
In considering the probable seat of the lesion of the trigeminal nerve, Dr. Markoe thought it must lie between the emergence of the nerve from the pons Varolii and its entrance into the Gasserian ganglion. If the

lesion were within the brain or pons, there probably would be other manifestations.

Attention was also called to the scarcity of the moustache on the right side, and to its whiter color.

UNUSUAL ABSCESSSES CONNECTED WITH SPINAL DISEASE.

THE PRESIDENT presented a boy (with illustration), eight years of age, who exhibited unusually large ab-



scesses over the trochanters and upper two-thirds of both thighs resulting from spinal disease in the lumbar region, which latter began four years ago, and two years later the swellings over the anterior portion of the external iliac and trochanteric regions began to make their appearance, and increased in size until at present they are each as large as a loaf of bread. Examination per rectum showed that the matter had worked its way down on either side of the projecting surfaces of the sacrum, and had passed out through the sciatic notch.

DR. LANGE asked what was the proposed form of treatment.

THE PRESIDENT replied that, inasmuch as the abscesses were increasing in size, and the patient's condition deteriorating, he intended to open and drain them, one at a time, under full antiseptic precautions.

NEWS ITEMS.

CANADA.

(From our Special Correspondent.)

ONTARIO MEDICAL COUNCIL.—The election for members to the Council will be held May 26. It is expected that there will be quite a large number of new men elected to fill vacancies caused by resignations, and that many of the old members will have difficulty in securing reelection.

ONTARIO MEDICAL ASSOCIATION.—The fifth annual meeting of this Association will be held in London, Ontario, June 3d and 4th. Many interesting papers have been promised, and discussions in the following subjects are announced: Diphtheria, plaster splints, intrauterine medication; and uses of cocaine hydrochlorate.

Dr. A. Worthington is President of the Association for this year.

PUBLIC OPINION ON THE ACTION OF THE ASSOCIATION ON THE ORGANIZATION OF THE INTERNATIONAL MEDICAL CONGRESS.—The recent action taken by the American Medical Association is no more effective than would be a pope's bull against a comet, and was an untimely and over-zealous effort to undo what had been

placed in charge of a Committee previously elected to discharge, without restriction, a special duty. The resolution which created the Committee does not ask it to report, thus showing clearly that it was the intention of the Association to give it full executive power. The work which it has performed should be accepted without special dissent by all who have any interest in the forthcoming meeting of the International Medical Congress, as its success depends upon its remaining undisturbed. The grievances which were presented at New Orleans are too trivial to require serious comment. The sources from which they came, and which coaxed the Association into performing a meaningless act, give no guarantee that the work can be any more satisfactorily performed than it has already been.—*Medical Record.*

Just as it had begun to appear that the Committee had achieved something tangible in the direction of doing away with the difficulties to which we have alluded, by an unusually representative and creditable organization, comes this shameless attempt by a few soured men to throw cold water on the whole affair.

It was not that the malcontents cared a fig to oust any man on account of his ethical proclivities or the place of his residence; they simply wanted the "ins" to be made "outs" in order that they themselves might become "ins." To accomplish this purpose, they naturally seized hold of the most promising pretexts, and the event proved the depth of their cunning.—*New York Medical Journal.*

The only subject on which action was taken of doubtful propriety, was in relation to the proposed International Medical Congress of 1887.—*Journal of the American Medical Association.*

A score somewhat above the customary high-water mark was made, in consequence of a breeze stirred up by certain unhappy critics relative to the preliminary work of the Executive Committee of the coming International Medical Congress.

Whatever may be the substrata of the grounds for the vigorous protest of Dr. Shoemaker and his supporters, there would seem to be nothing at the surface in the published "Rules and Preliminary Organization" of the Committee that could warrant the accusation that it had made a bargain with the New Code men, nor does a closer scrutiny of the document bring to light ought to discount Dr. Billings's statement that, "Whether the Committee had acted erroneously or not, it had acted to the best of its ability and with pure and honest motives, the character of its members being the best guarantee of this assertion."

A glance at the "Rules and Preliminary Organization" shows that twenty-nine States, the District of Columbia, and Canada, have been honored by the appointment of one or more of their distinguished physicians as members or officers of the Councils and Sections. . . . It is true that the territories, several of the States in the far West, and two of the Southern States are left out of the count, but so also are two Eastern units of our Union, one a Middle and the other a New England State.

When the relative importance of the great cities of the States as medical centres and conservators of medical talent is taken into account, this distribution of honors, though not above criticism, cannot be counted unjust, and we believe that the list in the main, though savor-

ing somewhat of petroleum and codfish, will be found to be fairly representative of the profession in America. —*Louisville Medical News.*

RULES GOVERNING VIVISECTION ADOPTED BY THE UNIVERSITY TRUSTEES.—The Trustees of the University of Pennsylvania have adopted the following rules in reference to vivisection:

1. Experiments may only be made on living animals for the purpose of serious inquiry, or for giving instruction of importance.
2. Experiments on animals are only permissible during lectures, so far as they are necessary for the lecturer to explain his subject matter.
3. The operative preparations for the lecture experiments are, as a rule, to be made before the commencement of the demonstration, and in the absence of those attending the lectures.
4. Experiments on animals may only be performed by the professors and lecturers or on their responsibility.
5. Experiments which can be made on the lower animals without essentially prejudicing the results required are only to be performed on those, and not on the higher animals.
6. In all cases, whether for research or instruction, in which it is not absolutely incompatible with the object of the experiment, the animal must be put under the full influence of anæsthetics, in such a manner that the effect of the anæsthetics shall last for a sufficient time.

These are substantially the rules issued by the Prussian Minister of Education and are founded on very careful inquiries made upon the practice of the German Universities. The Trustees, in adopting these rules for the control of all persons in the University who may have occasion to employ animals in research or for illustrative use in lecturing, expressed the desire that the professors concerned should see that they are strictly enforced, and gave them authority to refuse the use of laboratories to persons who do not obey the regulations.

THE PHILADELPHIA POLYCLINIC.—Dr. B. F. Baer, President of the Philadelphia Obstetrical Society, and late Demonstrator of Diseases of Women in the University of Pennsylvania, has been elected Professor of Diseases of Women and Children; and Dr. H. Augustus Wilson has been elected Professor of Fractures and Dislocations, and Secretary of the Faculty:

NOTES AND QUERIES.

HEMORRHAGIC MALARIAL FEVER.

To the Editor of THE MEDICAL NEWS.

SIR: In your issue of May 2d, is a synopsis of the proceedings of the Louisiana State Medical Society recently held in New Orleans, in which I am reported as saying in a discussion of the paper read by Dr. I. J. Newton on Hemorrhagic Malarial Fever, "that several cases in his (my) parish treated with large doses (quinine) had died. He (I) related a case of malarial hæmaturia in which there was no fever, but rather a subnormal temperature. He (I) had used diuretics, such as nitre and copaiba, and after the attack small doses of quinine."

I beg that you will allow me, through your Journal, to correct this error *in toto*, as it does me great injustice and misrepresents my views in the treatment of this disease from beginning to end. The reporter has unintentionally substituted my name for that of some other speaker. I did not participate in the discussion of the paper at all, so far as regards the treatment indicated. But the

writer, in tracing the history of the disease, fixed a knowledge of its first appearance in this country about 1846 in the State of Georgia. In reference to this point, I did state that as early as 1837 and up to 1843 I encountered and treated many cases of this disease in the Wabash and White River bottoms in the States of Indiana and Illinois, and from 1843 to 1846 in the White River lowlands in the State of Arkansas, and that in each of these localities where I practised at the periods named, I found this disease more or less prevalent every year.

Yours very respectfully,
RICHARD H. DAY, M.D.

BATON ROUGE, LA.

TREATMENT OF CROUP.

To the Editor of THE MEDICAL NEWS.

SIR: An editorial in your last number has honored me by referring to my views concerning the treatment of croup. Some of the statements contained therein are rather incorrect, so that I beg the privilege of referring to it in a future issue of your Journal, and detailing, briefly and compactly, all I have to say on the subject.

Very respectfully yours,
A. JACOBI, M.D.

110 W. 34th St., NEW YORK, May 11, 1885.

We shall be most happy to give space to Dr. Jacobi's intended article.—ED.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM MAY 5 TO MAY 11, 1885.

MCKEE, JAMES C., *Major and Surgeon*.—Sick leave of absence still further extended four months on surgeon's certificate of disability.—*S. O. 105, A. G. O., May 8, 1885.*

BILL, JOSEPH H., *Major and Surgeon*.—Ordered for duty as member of Army Medical Examining Board, New York City. *N. Y.—S. O. 100, A. G. O., May 2, 1885.*

SPENCER, WILLIAM G., *Captain and Assistant Surgeon*.—From Department of the East to Department of Dakota.—*S. O. 100, A. G. O., May 2, 1885.*

BRECKEMIR, LOUIS, *Captain and Assistant Surgeon*.—From Department of the East to Department of the Platte.—*S. O. 100, A. G. O., May 2, 1885.*

DAVIS, WILLIAM B., *Captain and Assistant Surgeon*.—From Department of Dakota to Department of the East.—*S. O. 100, A. G. O., May 2, 1885.*

STERNBERG, GEORGE M., *Major and Surgeon*.—Detailed to attend, as a delegate on the part of the Government of the United States, the Sanitary Conference to be held at Rome, Italy, on May 15, 1885.—*S. O. 103, A. G. O., May 6, 1885.*

BROWN, JUSTUS M., *Major and Surgeon*.—From Department of the East to Department of the Platte.—*N. O. 105, A. G. O., May 8, 1885.*

DEWITT, CALVIN, *Captain and Assistant Surgeon*.—Ordered to Department of the East.—*S. O. 105, A. G. O., May 8, 1885.*

COWDRAY, STEVENS G., *Captain and Assistant Surgeon*.—Assigned to duty as Post Surgeon, Fort Bliss, Texas.—*S. O. 65, Department of Missouri, May 2, 1885.*

DELOFFRE, A. A., *Captain and Assistant Surgeon*.—Assigned to duty at Fort Sisseton, Dakota Territory.—*S. O. 46, Department of Dakota, May 4, 1885.*

WYETH, M. C., *First Lieutenant and Assistant Surgeon*.—Ordered for temporary duty at Fort Wadsworth, N. Y. H.—*S. O. 95, Department of the East, May 6, 1885.*

THE MEDICAL NEWS will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.

Local papers containing reports or news items should be marked. Letters, whether written for publication or private information, must be authenticated by the names and addresses of their writers—of course not necessarily for publication.

All communications relating to the editorial department of the NEWS should be addressed to No. 1004 Walnut Street, Philadelphia.